ZONING

Please refer to the Integrated Development Ordinance (IDO) for specifics regarding the NR-BP, NR-C, PD, NR-PO-A, PC, R-1B, MX-L zones.

HISTORY

CITY of ALBUQUERQUE
NINETEENTH COUNCIL

COUNCIL BILL NO. R-11-311 ENACTMENT NO. R-2012-023

SPONSORED BY: Isaac Benton, by request

RESOLUTION

ADOPTING THE FACILITY PLAN: ELECTRIC SYSTEM TRANSMISSION AND GENERATION (2010-2020) (THE "2010 ELECTRIC FACILITIES PLAN") AND REPEALING THE FACILITY PLAN: ELECTRIC SERVICE TRANSMISSION AND SUBTRANSMISSION FACILITIES (1995-2005) (THE "1995 ELECTRIC FACILITIES PLAN").

WHEREAS, the Council, the Governing Body of the City of Albuquerque, has the authority to adopt and amend plans for the physical development of areas within the planning and platting jurisdiction of the City as authorized by statute, Section 3-19-3, NMSA 1978, and by its home rule powers; and

WHEREAS, the Electric Facilities Plan is a Rank II facility plan that describes the electrical transmission system serving the City of Albuquerque and unincorporated Bernalillo County; and

WHEREAS, the City of Albuquerque adopted the 1995 Electric Facilities Plan in 1996 (Enactment Number R-1996-38) and adopted an amendment in 2000 (Enactment Number R-2000-116), but has not revisited the Plan since then; and

WHEREAS, staff of the City of Albuquerque, Bernalillo County and the Public Service Company of New Mexico (PNM) have worked together to update and clarify the existing Plan through technical team meetings; and

WHEREAS, staff of the City, the County and PNM have expressed their support for and recommendation of the 2010 ELECTRIC FACILITIES PLAN; and

WHEREAS, on July 14, 2011, the Environmental Planning Commission (EPC), in its advisory role on land use and planning matters, recommended approval to the City Council of the 2010 ELECTRIC FACILITIES PLAN; and

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WHEREAS, the 2010 ELECTRIC FACILITIES PLAN includes a project list for 2010-2020, a streamlined and clarified review process, an updated glossary, text and graphics, and addresses generation technologies such as solar and wind.

BE IT RESOLVED BY THE COUNCIL, THE GOVERNING BODY OF THE CITY OF ALBUQUERQUE:

SECTION 1. The Facility Plan: Electric Service Transmission and Subtransmission Facilities Plan (1995-2005) (the "1995 Electric Facilities Plan"), adopted in 1996, is hereby repealed and replaced with the Facility Plan: Electric System Transmission and Generation (2010-2020) (the "2010 Electric Facilities Plan"). In the event of conflicting statements between the two Plans, the newer attached Plan shall govern.

SECTION 2. FINDINGS ACCEPTED. The City Council adopts the following findings as recommended by the Environmental Planning Commission (EPC):

1. This request is for a recommendation to the City Council regarding text amendments to the Electric Service Transmission and Subtransmission Facilities Plan (1995-2005) (the "1995 Electric Facilities Plan"), a Rank II facilities plan which describes the electric transmission system serving the City of Albuquerque and unincorporated Bernalillo County.

2. The proposed text amendments consist of the following: a list of proposed electric facility projects for 2010-2020, a description and clarification of the review process, the addition of generation technologies such as solar and wind, a glossary of technical terms and an appendix of photo examples. Some language, organizational and graphic improvements are also included.

3. The proposed text amendments have been incorporated into an updated version of the 1995 Electric Facilities Plan entitled Facility Plan: Electric System Transmission & Generation (2010-2020) (the "2010 Electric Facilities Plan").

4. The EPC's task is to make a recommendation to the City Council regarding the proposed text amendments. The City Council is the City's Zoning Authority and therefore will make the final decision. The EPC is a recommending body.

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5. The 2010 Electric Facilities Plan is being considered concurrently through Bernalillo County's development review process (ZSPR-20110001). The County Planning Commission (CPC) held a public hearing on July 6, 2011 and deferred the County request for three months. The date of the subsequent Bernalillo County Commission (BCC) hearing is undetermined as of this writing.

6. The Albuquerque/Bernalillo County Comprehensive Plan, the City of Albuquerque Comprehensive Zoning Code and the 1995 Electric Facilities Plan are incorporated herein by reference and made part of the record for all purposes.

7. Intent of the City Charter:

Establishing and subsequently amending a Rank II Facility Plan to address electric system transmission and generation is an exercise in local self government (City Charter, Article 1). Standards for transmission line corridors and transmission/substation facilities, which address location, siting, environmental considerations and landscaping, generally express the Council's desire to ensure the proper use and development of land, and to promote and maintain a humane urban environment (City Charter, Article IX).

8. Intent of the Zoning Code (Section 14-16-1-3):

The proposed text amendments generally further the intent of the Zoning Code because they would update and improve a Rank II facility plan, the general purpose of which is to promote and maintain the health, safety and general welfare of the public.

9. The request furthers the following Comprehensive Plan Goals regarding Land Use and Environmental Protection & Heritage Conservation, respectively:

A. Developing and Established Urban Area Goal (Section B.5): The proposed text amendments would generally contribute to creating a quality urban environment. Clarification of the process would help ensure adequate review of projects, which must follow design standards to minimize impacts and contribute to a visually pleasing built environment.

B. Developed Landscape Goal (Section C.8): The proposed text amendments would not substantially alter existing design standards. Quality

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of the developed landscape would be maintained, and may generally improve due to the addition of a process to address generation technologies.

10. The request furthers the following Community Resource Management Goals of the Comprehensive Plan:

A. Service Provision Goal (Section D.1). The electric system can be managed in part through land use planning. The Electric Facilities Plan already provides a mechanism to link facilities planning to land use planning goals and policies. The proposed text amendments strengthen this mechanism by addressing generation technologies and making the approval process more transparent.

B. Energy Management (Section D.3). The proposed text amendments would contribute to maintaining an adequate supply of electric energy. Planning electric facilities is a technique for managing electric energy; projects serve to expand and maintain the electric transmission and generation system.

C. Economic Development (Section D.6). The proposed text amendments would add an economic development section. Electric facilities projects generally support economic development efforts. The existing design and location standards will continue to help ensure that electric projects are balanced with visual, ecological and land use considerations which promote overarching environmental and social goals.

11. The request furthers the following, applicable Comprehensive Plan policies:

A. Policy II.C.4a-noise considerations/planning process. The proposed text amendments would update the Electric Facilities Plan with respect to noise. Noise levels shall not exceed National Electrical Manufacturers Association guidelines. This regulation, and the fact that electric facility location is planned according to standards, helps prevent land use/noise conflicts.

B. Policy II.C.8c-incidental structures/visual intrusion. The existing design standards serve to minimize adverse visual effects. The proposed text amendments would not substantially alter the design standards; minimization

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of visual intrusion would continue. The siting study required for generation facilities would address visual considerations.

C. Policy II.D.3c-alternative/renewable energy sources. The Electric Facilities Plan is a mechanism for land use planning. Addressing alternative generation technologies, such as solar and wind, is a key reason for updating the Plan. The proposed text amendments are a step toward maximizing the potential for efficient use of alternative and renewable energy sources.

12. The revision process began in January 2010 with the need to update the project list and address generation technologies. Staff from the City of Albuquerque, Bernalillo County and the Public Service Company of New Mexico (PNM) collaborated. A Technical Team was formed; members reviewed a draft version Plan and provided comments.

13. The proposed 2010 Electric Facilities Plan features two significant improvements in addition to the standard updating of the Electric Projects list: clarification of the review and approval process and incorporation of generation technologies such as solar and wind.

14. The proposed text amendments warrant revision in places to improve clarity and remedy minor errors. The proposed conditions of approval are intended to achieve this.

15. The proposed text amendments were announced in the Albuquerque Journal, the Neighborhood News and on the Planning Department's web page. The Office of Neighborhood Coordination (ONC) sent e-mail notification on June 9, 2011 to neighborhood representatives. As of this writing, Staff has received a few informational inquiries and phone calls. There is no known opposition to the request.

SECTION 3. CONDITIONS OF APPROVAL. As recommended by the Environmental Planning Commission (EPC), the City Council adopts the Conditions of Approval. These conditions provide further clarification, reorganize some text, make minor editorial revisions and correct referencing.

SECTION 4. EFFECTIVE DATE AND PUBLICATION. This legislation shall take effect five days after publication by title and general summary.

SECTION 5. SEVERABILITY CLAUSE. If any section, paragraph, sentence, clause, word or phrase of this resolution is for any reason held to be invalid or

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unenforceable by any court of competent jurisdiction, such decision shall not affect the validity of the remaining provisions of this resolution. The Council hereby declares that it would have passed this resolution and each section, paragraph, sentence, clause, word or phrase thereof irrespective of any provisions being declared unconstitutional or otherwise invalid.

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PASSED AND ADOPTED THIS 22nd DAY OF February , 2012
BY A VOTE OF: 9 FOR 0 AGAINST.

Trudy E. Jones, President
City Council

APPROVED THIS 5th DAY OF March, 2012

Bill No. R-11-311

Richard J. Berry, Mayor
City of Albuquerque

ATTEST:

Amy B. Bailey, City Clerk

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APPLICATION INFORMATION

City of Albuquerque

DEVELOPMENT REVIEW APPLICATION

Effective 5/17/18

Please check the appropriate box and refer to supplemental forms for submittal requirements. All fees must be paid at the time of application.

Administrative Decisions	☐ Historic Certificate of Appropriateness – Major *(Form L)*	☐ Wireless Telecommunications Facility Waiver *(Form W2)*
☐ Archaeological Certificate *(Form P3)*	☐ Historic Design Standards and Guidelines *(Form L)*	**Policy Decisions**
☐ Historic Certificate of Appropriateness – Minor *(Form L)*	☐ Master Development Plan *(Form P1)*	☐ Adoption or Amendment of Comprehensive Plan or Facility Plan *(Form Z)*
☐ Alternative Signage Plan *(Form P3)*	☑ Site Plan – EPC including any Variances – EPC *(Form P1)*	☐ Adoption or Amendment of Historic Designation *(Form L)*
☐ WTF Approval *(Form W1)*	☐ Site Plan – DRB *(Form P2)*	☐ Amendment of IDO Text *(Form Z)*
☐ Minor Amendment to Site Plan *(Form P3)*	☐ Subdivision of Land – Minor *(Form S2)*	☐ Annexation of Land *(Form Z)*
Decisions Requiring a Public Meeting or Hearing	☐ Subdivision of Land – Major *(Form S1)*	☐ Amendment to Zoning Map – EPC *(Form Z)*
☐ Conditional Use Approval *(Form ZHE)*	☐ Vacation of Easement or Right-of-way *(Form V)*	☐ Amendment to Zoning Map – Council *(Form Z)*
☐ Demolition Outside of HPO *(Form L)*	☐ Variance – DRB *(Form V)*	**Appeals**
☐ Expansion of Nonconforming Use or Structure *(Form ZHE)*	☐ Variance – ZHE *(Form ZHE)*	☐ Decision by EPC, LC, DRB, ZHE, or City Staff *(Form A)*

APPLICATION INFORMATION

Applicant: PNM		Phone: 505.241.2792
Address: 2401 AZTEC NE		Email: Laurie.Moye@pnm.com
City: ALBUQUERQUE	State: NM	Zip: 87107
Professional/Agent (if any): LAURIE MOYE		Phone: 505.241.2792
Address: 2401 AZTEC NE		Email: Laurie.Moye@pnm.com
City: ALBUQUERQUE	State: NM	Zip: 87107
Proprietary Interest in Site:	List all owners:	

BRIEF DESCRIPTION OF REQUEST

REBUILD AND DOUBLE-CIRCUIT OF THE PNM EXISTING 115kV TRANSMISSION LINE.

SITE INFORMATION (Accuracy of the existing legal description is crucial! Attach a separate sheet if necessary.)

Lot or Tract No.: N/A LINEAR FACILITY		Block:	Unit:
Subdivision/Addition:		MRGCD Map No.:	UPC Code:
Zone Atlas Page(s): H10, H9, J8, J7,	Existing Zoning: PD, NR-PO-A, NR-PO-C, NR-C, NR-BP, R1-A		Proposed Zoning: N/A
# of Existing Lots: M8, N8	# of Proposed Lots: N/A		Total Area of Site (acres):

LOCATION OF PROPERTY BY STREETS

Site Address/Street: NEAR LAMORADA PL Between: TO WEST OF UNSER & WEST OF ARROYO VISTA NW; and: AND PARALLEL WEST OF 118TH ST SW.

CASE HISTORY (List any current or prior project and case number(s) that may be relevant to your request.)

Signature: Laurie Moye	Date: 10-31-18
Printed Name: LAURIE MOYE	☐ Applicant or ☑ Agent

FOR OFFICIAL USE ONLY

Case Numbers	Action	Fees
SI-2018-00220	SP	$590.00
Meeting/Hearing Date: Dec. 13, 2018		Fee Total: $590.00
Staff Signature:	Date: 11-1-18	Project # PR-2018-001757

FORM P1: SITE PLAN – EPC

Please refer to the EPC hearing schedule for public hearing dates and deadlines. Your attendance is required.

A single PDF file of the complete application including all plans and documents being submitted must be emailed to PLNDRS@cabq.gov prior to making a submittal. Zipped files or those over 9 MB cannot be delivered via email, in which case the PDF must be provided on a CD.

☒ ***INFORMATION REQUIRED FOR ALL SITE PLAN – EPC AND VARIANCE – EPC APPLICATIONS***

__ Interpreter Needed for Hearing? ____ if yes, indicate language: _____

N/A Letter of authorization from the property owner if application is submitted by an agent

☒ Zone Atlas map with the entire site clearly outlined and labeled

☒ Required notices with content per IDO Section 14-16-6-4(K)(6)

- ☒ Office of Neighborhood Coordination notice inquiry response, notifying letter, and proof of first class mailing
- __ Proof of emailed notice to affected Neighborhood Association representatives
- ☒ Buffer map and list of property owners within 100 feet (excluding public rights-of-way), notifying letter, and proof of first class mailing

☒ Sign Posting Agreement

☒ Signed Traffic Impact Study (TIS) Form

☒ Completed Site Plan Checklist

☒ **SITE PLAN – EPC**

☐ **MASTER DEVELOPMENT PLAN**

☐ **MAJOR AMENDMENT TO SITE PLAN – EPC OR MASTER DEVELOPMENT PLAN**

☐ **EXTENSION OF SITE PLAN – EPC OR MASTER DEVELOPMENT PLAN**

☒ Proof of Pre-Application Meeting with City staff per IDO Section 14-16-6-4(B)

☒ Proof of Neighborhood Meeting per IDO Section 14-16-6-4(C)

__ Sites 5 acres or greater: Archaeological Certificate in accordance with IDO Section 14-16-6-5(A)

☒ Justification letter describing, explaining, and justifying the request per the criteria in IDO Sections 14-16-6-6(H)(3) or 14-16-6-6(F)(3), as applicable

N/A Explanation of requested deviations, if any, in accordance with IDO Section 14-16-6-4(O)

__ Scaled Site Plan or Master Development Plan and related drawings (10 copies, 24" x 36" folded)

Master Development Plans should include general building and parking locations, as well as design requirements for buildings, landscaping, lighting, and signage.

Site Plan or Master Development Plan and related drawings reduced to 8.5" x 11" format (1 copy)

N/A Landfill disclosure statement on the plat per IDO Section 14-16-5-2(G) if site is within a designated landfill buffer zone

☐ **VARIANCE – EPC**

__ In addition to the above requirements for the Site Plan – EPC or Master Development Plan the proposed variance request is related to, please describe, explain, and justify the variance per the criteria in IDO Section 14-16-6-6(M)(3).

Note: Any variance request from IDO Standards in Sections 14-16-5-3 (Access and Connectivity), 14-16-5-4 (Subdivision of Land), 14-16-5-5 (Parking and Loading), or DPM standards shall only be granted by the DRB per IDO Section 14-16-6-6(L) See Form V.

I, the applicant or agent, acknowledge that if any required information is not submitted with this application, the application will not be scheduled for a public meeting or hearing, if required, or otherwise processed until it is complete.

Signature: Laurie Moye, agent for PNM	**Date:** 10-31-18
Printed Name: Laurie Moye	☐ Applicant or ☐ Agent

FOR OFFICIAL USE ONLY

Project Number:	Case Numbers
	-
	-
	-
Staff Signature:	
Date:	

CITY OF ALBUQUERQUE 1706 NEW MEXICO

CITY OF ALBUQUERQUE

TRAFFIC IMPACT STUDY (TIS) FORM

APPLICANT: PNM **DATE OF REQUEST:** 11/1/18 **ZONE ATLAS PAGE(S):** _____

CURRENT:

ZONING _____

PARCEL SIZE (AC/SQ. FT.) _____

LEGAL DESCRIPTION:

LOT OR TRACT # _____ BLOCK # _____

SUBDIVISION NAME _____

REQUESTED CITY ACTION(S):

ANNEXATION [ ]

ZONE CHANGE [ ]: From _____ To _____

SECTOR, AREA, FAC, COMP PLAN [ ]

AMENDMENT (Map/Text) [ ]

SITE DEVELOPMENT PLAN:

SUBDIVISION* [ ] AMENDMENT [ ]

BUILDING PERMIT [ ] ACCESS PERMIT [ ]

BUILDING PURPOSES [ ] OTHER [X] Electrical Transmission Line

*includes platting actions

PROPOSED DEVELOPMENT:

NO CONSTRUCTION/DEVELOPMENT [X]

NEW CONSTRUCTION [ ]

EXPANSION OF EXISTING DEVELOPMENT [ ]

GENERAL DESCRIPTION OF ACTION:

OF UNITS: _____

BUILDING SIZE: _____(sq. ft.)

Note: changes made to development proposals / assumptions, from the information provided above, will result in a new TIS determination.

APPLICANT OR REPRESENTATIVE Laura Moya DATE 11-1-18

(To be signed upon completion of processing by the Traffic Engineer)

Planning Department, Development & Building Services Division, Transportation Development Section -
2ND Floor West, 600 2nd St. NW, Plaza del Sol Building, City, 87102, phone 924-3994

TRAFFIC IMPACT STUDY (TIS) REQUIRED: YES [ ] NO [X] BORDERLINE [ ]

THRESHOLDS MET? YES [ ] NO [X] MITIGATING REASONS FOR **NOT** REQUIRING TIS: PREVIOUSLY STUDIED: [ ]

Notes: Transmission line, no traffic impact

If a TIS is required: a scoping meeting (as outlined in the development process manual) must be held to define the level of analysis needed and the parameters of the study. ***Any subsequent changes to the development proposal identified above may require an update or new TIS.***

TRAFFIC ENGINEER

DATE 11/16/18

Required **TIS must be completed prior to applying to the EPC and/or the DRB.** Arrangements must be made prior to submittal if a variance to this procedure is requested and noted on this form, otherwise the application may not be accepted or deferred if the arrangements are not complied with.

TIS **-SUBMITTED** ___/___/___ _____ _____

-FINALIZED ___/___/___ TRAFFIC ENGINEER DATE

Revised January 20, 2011

PNM
2401 Aztec NE, Z200
Albuquerque, NM 87107
505-241-2792
www.pnm.com

November 1, 2018

Mr. Derek Bohannan, Chair
Environmental Planning Commission
City of Albuquerque
P.O. Box 1293
Albuquerque, NM 87103

Subject: PNM WD2 115kV Transmission Line System Improvements Project

Dear Chairman Bohannan,

PNM submits to the Environmental Planning Commission for approval of a proposed upgrade and rebuild of an electric transmission line per the adopted *Facility Plan Electric System Transmission and Generation (2010-2020) City of Albuquerque and Bernalillo County* (Plan) in accordance with the process described in that Plan and in the Integrated Development Ordinance (IDO).

The WD2 115kV Transmission Line System Improvements Project (Project) is an upgrade and rebuild of the existing WD 115kV transmission line in the northwest and southwest area of the City of Albuquerque. The Project exits West Mesa Switching Station and travels approximately 2.8 miles south and west through the Ladera Business Park, crossing Unser Boulevard NW west along the existing transmission corridor, crossing Arroyo Vista Boulevard NW and continuing west to the city limits. The Project turns south as it enters Bernalillo County and re-enters the City of Albuquerque just south of the Westgate Dam Drainage for approximately 1.4 miles as it parallels the west side of the existing WS 345kV transmission line which generally follows 118th Street SW. The line will continue south to connect to the existing Huning Ranch Switching Station in Valencia County. The Project is a system improvement that is needed to provide the necessary capacity to serve the southern Albuquerque metropolitan region.

The Project is included as Project Number 23, WD 115kV Line Rebuild West Mesa - Huning Switching Station in Table 5, Description of Proposed Electric Facility Projects for 2010-2020 in the *Facility Plan: Electric System Transmission and Generation (2010-2020).*

Neighborhood Meetings

Meetings with neighborhood coalitions included:

- South Valley Coalition of Neighborhood Associations – September 13, 2018
- South West Alliance of Neighborhoods (SWAN Coalition) – October 2, 2018
- Westside Coalition of Neighborhood Associations – October 3, 2018

Meeting notification, correspondence and minutes for each coalition meeting are provided in Enclosure 1. The coalitions were also encouraged to attend the neighborhood open house meetings listed below.

Neighborhood meetings were held with the following neighborhood associations and property owners:

For Project Location North of I-40 held October 9, 2018, 6:00 p.m. to 7:30 p.m. at Horizon Academy West:

- Tres Volcanes Neighborhood Association
- Las Lomitas Neighborhood Association
- Ladera West Neighborhood Association

Attendees: three people attended the open house meeting.
Meeting notification, sign in sheets, correspondence and minutes for the neighborhood meeting north of I-40 are provided in Enclosure 2. Only one comment was made on the flip chart: All my questions were answered.

For Project Location South of I-40 held October 10, 2018, 6:00 p.m. – 7:30 p.m. at Atrisco Heritage High School:

- Orchards at Anderson Heights Subassociation
- Route 66 West Neighborhood Association
- Anderson Heights Master Association
- Westgate Heights Neighborhood Association

Attendees: Three people attended the open house meeting. Meeting notification, sign in sheets, correspondence and minutes for the neighborhood meeting south of I-40 are provided in Enclosure 3. No comments were made on the flip chart.

An additional meeting, which was not required, was held for property owners and businesses in the Ladera Business Park on September 12, 2018, 6:00 p.m. to 7:00 p.m. Attendees: one person attended the open house meeting. Meeting notification, correspondence and minutes for the Ladera Business Park meeting are provided in Enclosure 4.

The zone atlas pages are indicated on the route map of the project in Enclosure 5.

PNM appreciates the Environmental Planning Commission consideration of this application. If you have any questions on this submittal or need further information, please contact me at 505-241-2792.

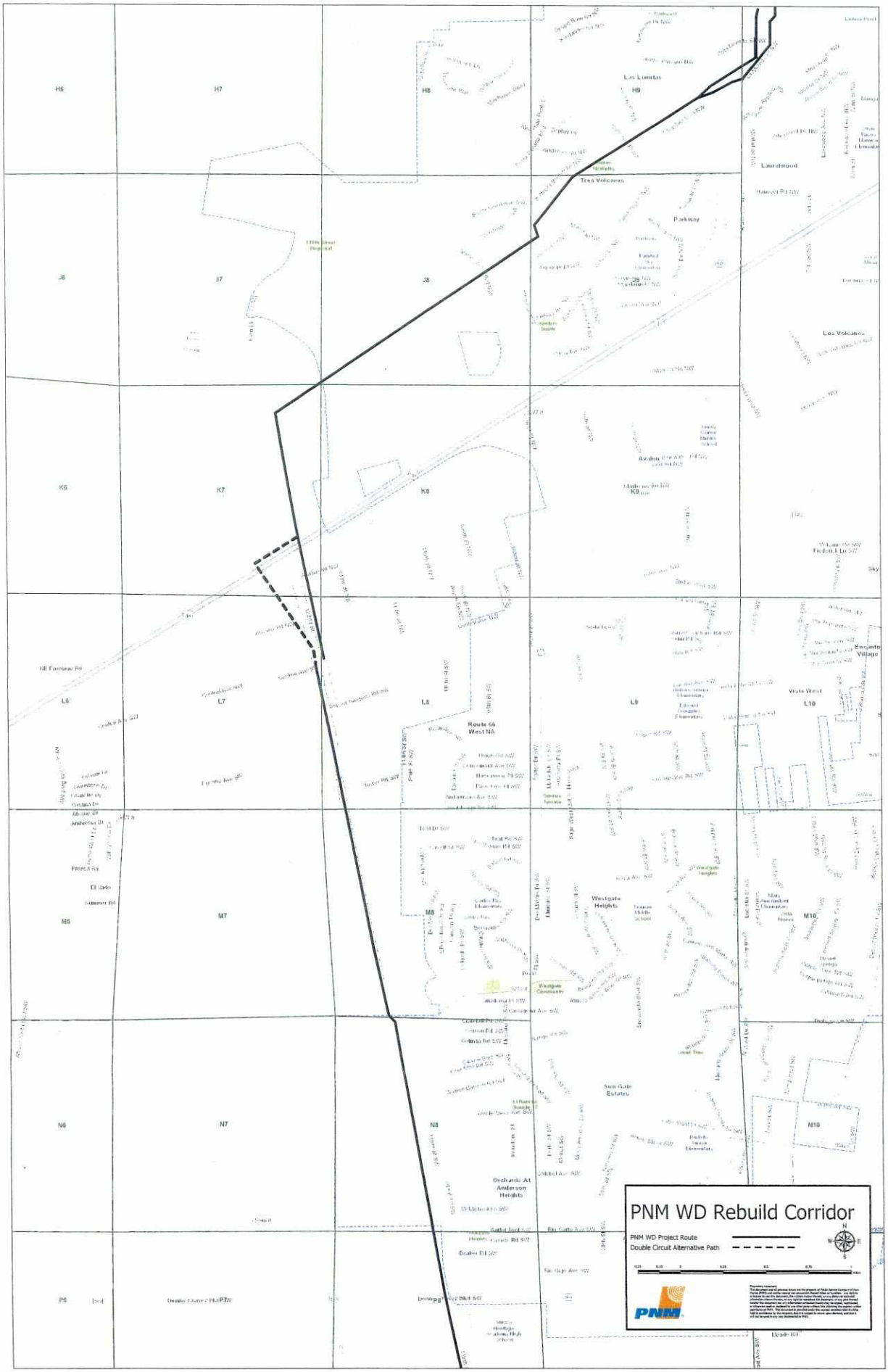
Sincerely,

Laurie Moye

Laurie Moye
Coordinator, Regulatory Project and Public Participation

Enclosures:

Siting Study
Landowner Notification Buffer Map North and South of I-40
PRT Meeting Notes
ONC Public Notice Inquiry
Enclosure 1: Coalition Meetings Notification, Correspondence and Meeting Minutes
Enclosure 2: Neighborhood Meeting North of I-40 Notification, Correspondence and Meeting Minutes
Enclosure 3: Neighborhood Meeting South of I-40 Notification, Correspondence and Meeting Minutes
Enclosure 4: Ladera Business Park Meeting Notification, Correspondence and Meeting Minutes
Enclosure 5: PNM WD Rebuild Corridor - Project Route Map with Zone Atlas Pages


PNM WD Rebuild Corridor
PNM WD Project Route
Double Circuit Alternative Path
PNM

Albuquerque & Bernalillo County Comprehensive Plan as adopted by City Council in March 2017

City of Albuquerque Integrated Ordinance revised through May 2018 Section 6-6(H)(3)

Section 6-6(H)(3)
6-6(H)(3)(a) the Site Plan is consistent with the ABC Comprehensive Plan, as amended in the following responses:

1. In Chapter 12, Infrastructure, Community Facilities and Services of the Comprehensive Plan on page 12-10, it is stated that, *"PNM is obligated to meet future customer needs for electrical service, provide system reliability, and operate safe facilities… New System facilities, including transmission lines, switching stations, and substations will need to be constructed to meet future demand for electrical service, replace aged infrastructure or to enhance reliability in coming years."*

   Response:
   The WD2 Project meets the obligation and meets all three needs: 1) the WD2 Project will meet future electric demand, 2) the WD2 Project was built in 1951 and is a replacement of aged infrastructure, and 3) will maintain and enhance reliability during and after construction.

2. *Goal 7.6 Context-Sensitive Infrastructure*
   Match infrastructure design to intended densities and development patterns to minimize lifecycle costs and conserve natural resources.
   POLICY 7.6.3 Utility Infrastructure: Encourage design of visible infrastructure (surface and overhead) that respects the character of neighborhoods and communities and protects significant natural and cultural features. [ABC]
   b) Minimize disturbance to environmentally sensitive areas, such as Major Public Open Space and cultural landscapes, and minimize visual impact of utilities with careful siting and design.

   Response:
   The WD2 Project respects the character of the neighborhoods and communities that are located adjacent to the existing transmission corridor that has been in place since the 1950s. Careful siting and design within the existing transmission corridor minimizes visual impacts.

3. *Goal 12.1 Infrastructure Systems*
   Plan, coordinate, and provide for efficient equitable, and environmentally sound infrastructure to support existing communities and the Comp Plan's vision for future growth.
   POLICY 12.1.6 Energy Systems: Coordinate with energy providers to safeguard essential infrastructure to serve existing development and ensure a safe, adequate, and reliable supply to support growth. [ABC]
   a) Maintain an economical and environmentally-sound supply of energy through energy conservation and the use of alternative and renewable energy sources.
   f) See also the Electric System Transmission and Generation Facility Plan (2010-2020).

   Response:
   The WD2 Project will provide a reliable supply of energy to support growth in the metropolitan Albuquerque region.

4. *Goal 13.4 Natural Resources*
   Protect, conserve, and enhance natural resources, habitat and ecosystems.
   POLICY 13.4.3 Energy Resources: Conserve energy and capitalize on renewable energy resources that are plentiful in our region, especially solar and wind energy.
   a) Encourage renewable energy generation and use in private and public development.
   Response:
   The WD2 Project will support maintaining an adequate, economical supply of energy delivering wind and solar renewable energy through the electric grid connection.

6-6(H)(3)(b) is not applicable.

6-6(H)(3)(c) this Project follows the adopted *Facility Plan: Electric System Transmission and Generation (2010-2020)* and complies as applicable to the other provisions of governing codes.

6-6(H)(3)(d) is not applicable.

6-6(H)(3)(e) there are no significant adverse impacts for this Project in PNM easement and transmission corridors.

Facility Plan Electric System Transmission and Generation (2010-2020)

The Site Plan is consistent with the *Facility Plan Electric System Transmission and Generation (2010-2020)* location standards in the following responses:

A. Location Standards

1. Where practical, future transmission lines shall avoid traversing residential land.

   Response:
   The Project route avoids traversing residential land.

2. There are three levels of preference for the location of transmission lines in the City of Albuquerque and Bernalillo County.

   In order of preference they are as follows:
   a. Interstate highways and arterial streets are particularly appropriate corridors for transmission lines; some major drainage channels may also be appropriate.
   b. Collector streets, especially nonresidential collector streets, are appropriate in some cases for transmission lines.
   c. Other potential corridors will be evaluated where appropriate.

   Response:
   The WD2 Project crosses one interstate highway, three major streets and parallels one major street in the City of Albuquerque. The Current Roadway Functional Classification System map for the Albuquerque Metropolitan Planning Area (approved by the Metropolitan Transportation Board and updated and approved by the Federal Highway Administration on March 15, 2016) identifies the following streets:
   - *Unser Blvd. – Principal Arterial*
   - *Arroyo Vista NW – Major Collector*
   - *Interstate 40 – Interstate*
   - *Central Ave. – Principal Arterial*
   - *118th Street NW – Major Collector*

   Access to the WD2 Project will be from the paved roads along the corridor as well as along the existing patrol 2-tracks associated with the existing WD line. There are no proposed new streets.

3. Existing transmission routes satisfying criteria in this section should be used in preference to establishing new routes.

   Response:
   The Project is a rebuild and upgrade of an existing transmission line and is located within an existing utility corridor and easements.

4. Wherever practical, shared rights-of-way for the placement of aboveground utility corridors such as telecommunication facilities, telephone and cable television shall be encouraged.

Response:
The Project is a rebuild and upgrade of an existing transmission line and is located within an existing utility corridor thus utilizing shared rights-of-way.

5. In this 2010-2020 Plan, transmission facilities are planned as above ground. If underground transmission lines are desired for a particular project or area, the requesting entity should examine the mechanisms available to fund underground installation of transmission facilities consistent with the requirements of any applicable rules of the electric utility on file with the New Mexico Public Regulation Commission (PRC) or successor agency. Installation of underground facilities would be contingent upon (i) the agreement of the electric utility that undergrounding is appropriate and that any underground system will be technically and operationally equivalent to the above ground system that would otherwise be constructed; and (ii) the availability of funding for the differential costs associated with underground construction.

   Response:
   The Project is a rebuild and upgrade of an existing above-ground transmission line and is proposed as above-ground transmission.

6. Transmission facilities should be sited on the basis of electric utility system studies, their electric demand projections, and official City of Albuquerque and Bernalillo County plans and forecasts.

   Response:
   The Project is a rebuild and upgrade of an existing transmission line providing needed capacity to serve expanding customer load in the ABQ metropolitan area.

7. Existing transmission facilities can be relocated if the impacted electric utility, the City of Albuquerque and/or Bernalillo County agree to such relocation. Relocation of electric facilities must not adversely affect the electric utility's ability to provide reliable service. The Albuquerque City Council or Bernalillo County Board of County Commissioners, following written justification, may request relocation on public rights-of-way where such relocation is critical to the attainment of adopted public policies. Cost incurred in relocating facilities within private easements shall be paid for by those entities making the request.

   Response:
   N/A.

8. New lines over 115 kV may occur in the metropolitan area designated as Central Urban, Established Urban, Developing Urban, Semi-Urban, Rural and Open Space by the *Albuquerque/Bernalillo County Comprehensive Plan*. As the metropolitan area continues to grow, additional power lines will have to be added to the transmission system, and future transmission lines at a voltage greater than 115 kV may be needed.

   Response:
   The Project is a rebuild and upgrade of an existing transmission line that will provide the needed capacity to serve expanding customer load in the metropolitan Albuquerque area.

9. In siting new transmission and station facilities, the following siting constraints shall be considered:
   a. Exclusion Area -- Resource factors or land use values that preclude siting electric facilities due to officially stated or approved safety restrictions, plans or policies such as FAA-regulated areas at airports.

      Response:
      No exclusion areas are encountered by the Project.

   b. Environmental Considerations -- Resource factors or land use values where the presence of electric facilities may conflict with that resource or land use value. Environmental sensitivities do not preclude development of an overhead transmission line, but because of their conflict potential, are given special consideration in designating the alignment, substation location, and facility design and construction.

      Response:
      There are no known sensitive resources or environmental considerations present that would conflict with the proposed Project.

   c. FEMA Special Flood Hazard Areas -- Due to their conflict potential, these areas are given special consideration at the early stages in the designation of the line alignment, substation location, and facility design and construction.

      Response:
      The Federal Emergency Management Agency (FEMA) has identified Zone A and Zone AE flood hazard areas in association with the project area AMAFCA ponds, arroyos and draws totaling 0.78 miles of the 4.2 miles within City of Albuquerque. The project corridor passes through these areas, but no installation of structures or other ground disturbing construction is expected within them. If the final design indicates that a structure may occur within a Zone A or Zone AE flood hazard area, PNM will work in consultation with the appropriate flood zone authorities to address any requirements.

10. In siting new transmission line alignments, siting impacts shall be minimized.
    a. Visual -- New transmission corridor alignments shall be located to take advantage of existing topographic features to minimize visual impacts of transmission structures. A reasonable attempt shall be made to avoid lines and structures being the high points in the visual plane.

       Response:
       The WD2 Project respects the character of the neighborhoods and communities that are located adjacent to the existing transmission corridor that has been in place since the 1950s. Careful siting and design within the existing transmission corridor minimizes visual impacts.

    b. Ecological -- Where possible in siting new transmission lines, a route shall be chosen which minimizes the disturbances to and/or alteration of the natural environment. For example, alignments could avoid crossing hills at right angles to the contours and could cross wooded hills and mountains at an oblique angle to minimize the focus of attention on the alignment.

Response:
The WD2 Project is sited within an already developed existing transmission corridor north of I-40 and an existing utility corridor south of I-40 including a water line and natural gas pipeline, which minimizes disturbance to the natural environment. The corridor has been previously disturbed by current and previous transmission lines, utility lines and AMAFCA projects. There are no known sensitive resources or environmental considerations present that would conflict with the proposed Project.

c. Land Use -- In siting new transmission line alignments, consideration shall be given to minimizing disruption of existing land use patterns. Corridor alignments can parallel existing roads, fence lines, windbreaks, or other major patterns in the area. Particular attention in siting should be given to the Balloon Fiesta Park and Albuquerque International Sunport Airport.

Response:
The Project corridor in the City is within an existing transmission corridor. The corridor also includes a series of AMAFCA ponds used for drainage control. The area is generally developed north of I-40 on either side of the corridor. South of I-40, the transmission corridor is located along the west side of 118th Street NW on vacant, undeveloped land.

Existing land uses in the immediate vicinity of the WD2 Project north of I-40 include:

- *Electric utility transmission lines within an existing utility corridor including 6 separate transmission lines*
- *Commercial uses in Ladera Business Park*
- *Residential development west of Unser Blvd. NW to Arroyo Vista Blvd. NW on north and south side of the transmission corridor*
- *AMAFCA drainage ponds*
- *Vacant, undeveloped land*

Existing land uses in the immediate vicinity of the WD2 Project south of I-40 include:

- *Electric utility transmission lines within an existing utility corridor including AMAFCA facilities, existing water line and existing natural gas pipeline*
- *Residential development east of 118th Street SW*
- *Vacant, undeveloped land*

The Project north of I-40 is located on lands that are zoned either commercial, planned development, or planned community. The Project south of I-40 is located on lands that are zoned planned development or residential.

PRE-APPLICATION REVIEW TEAM (PRT) MEETING NOTES

PA# 18-290 Date: 10-2-18 Time: 1:00 pm

Address: 4.7 mi of line - see attached map

AGENCY REPRESENTATIVES AT MEETING:

Planning: Catalina Lehner

Code Enforcement: Jacobo Martinez

Fire Marshall: Eric Gonzales

Transportation:

Other:

PRT DISCUSSIONS ARE FOR INFORMATIONAL PURPOSES ONLY!

THEY ARE NON-BINDING AND DO NOT CONSTITUTE ANY KIND OF APPROVAL..

Additional research may be necessary to determine the exact type of application and/or process needed. Factors unknown at this time and/or thought of as minor could become significant as the case progresses.

REQUEST: Rebuild and double-circuit of existing WD 115kV PNM transmission line, some new easements.

SITE INFORMATION:

Zone: various Size: 4.7 mile line

Use: electric facility Overlay Zone:

Comp Plan Area Of: Comp Plan Corridor:

Comp Plan Center: MPOS or Sensitive Lands:

Parking: MR Area:

Landscaping: Street Trees:

Use Specific Standards:

Dimensional Standards:

*Neighborhood Organization/s: ~~Several~~ Westside Coalition, SWAN, SV Coalition, +/more

**This is preliminary information only. Neighborhood Organization information is only accurate when obtained from the Office of Neighborhood Coordination (ONC) at www.cabq.gov/neighborhoods/resources.*

PROCESS:

Type of Action: Site plan - EPC

Review and Approval Body: EPC Is this PRT a requirement? yes

PRE-APPLICATION REVIEW TEAM (PRT) MEETING NOTES

PA# 18-290 Date: 10-2-18 Time: 1:00pm

Address:

NOTES:

- The Rank II plans remain in effect w- adoption of the Integrated Development Ordinance (IDO)
- The Facility Plan: Electric System Transmission and Generation (2010-2020) applies
- In July 2018, the Facility Plan was amended administratively, as allowed by Table 1, to accomodate changes to two projects listed in Table 5- Description of Proposed Electric Facilities Projects
- the request pertains to Project #23. (The AA was for Project 23 + Project 26)
- Table 1- process, states that proposed electric facility project approval, for projects listed in Table 5, go to the EPC.
- Therefore, the request (Project 23 of Table 5) goes to the EPC.
- site plan EPC - 6-6(H). (Best fit available in IDO).
- project letter and route map (exhibit)
- sign posting - Unser at beginning and near 118th
- notification required - contact ONC, NAs + prop owners
- write up notification + meetings in project letter
- Review + Decision Criteria - site plan EPC 6-6(H)(3).
- Appendix A of Elec Systems Plan, follow.

SITING STUDY

PNM WD2 115kV TRANSMISSION LINE SYSTEM IMPROVEMENTS PROJECT SITING STUDY

November 2018

EXECUTIVE SUMMARY

The PNM WD2 115kV Transmission Line System Improvements Project Siting Study follows the adopted *Facility Plan: Electric System Transmission and Generation (2010-2020)* Appendix A Outline for a Typical Siting Study – Transmission Facility.

A. Project Description and Area to Be Served

PNM is proposing to rebuild the existing WD wood H-frame single-circuit 115kV transmission line, which was constructed in 1951, into a new steel double-circuit 115kV transmission line construction. "Double-circuit" is described as transmission line structures that are designed to carry two separate circuits. The WD2 115kV Transmission Line System Improvements Project (Project) is located on the west side of the City of Albuquerque (**Figure 1, Project Vicinity Map)**. During construction, the existing WD 115kV circuit will need to remain energized to continue to serve customers in the metropolitan area. Once constructed, the existing WD Line will be retired and removed. The design includes building the new double-circuit line in a new right-of-way corridor generally adjacent to other transmission corridors, see **Figures 2A and 2B**, **Project Route Location**. This arrangement requires construction crews to work near energized facilities. The Project is listed as #23 in the description of electric facility projects in the *Facility Plan: Electric System Transmission and Generation (2010-2020).*

The transmission system on the west side of Albuquerque grew between the 1950s and the 1970s establishing a network of 115kV, 230kV and 345kV transmission lines that serve the City and metropolitan region. Residential and commercial development since that time has built up to the edge of the easements. These transmission lines are important to the electrical network and are protected corridors.

Increasing loads are developing in the Albuquerque metropolitan region. The area served by the Project includes the southwest part of Albuquerque's West Side and south to Los Lunas, Bosque Farms and Belen. The WD2 Project will improve increasing load-serving capability in the metropolitan region. The Project in-service date is July 2020.

B. Alternative Corridors Examined

Three project alternatives were considered. They are:

Alternative 1:
Rebuild the WJ and WV corridor from West Mesa Switching Station to Dennis Chavez Boulevard SW then turn west in a new corridor to the WD corridor and rebuild the WD line south to Huning Ranch Switching Station; remove the existing WD line when completed.

Alternative 2:
Rebuild the WD line in new easement from West Mesa Switching Station to Huning Ranch Switching Station while the line remains energized; remove the existing WD line when completed.

Alternative 3:
Rebuild a portion of the WJ and WD corridor from West Mesa Switching Station to Huning Ranch Switching Station; temporarily connect with another 115kV transmission line; remove the existing WD line when completed.

C. Preferred Alternative

The selected alternative for the Project is Alternative 3. The route is located within the existing transmission corridor and the alignment allows for lower risk to worker safety, maintenance safety and risk of system outages. The alignment supports maintaining system reliability during and after construction.

I. INTRODUCTION

In accordance with the *Facility Plan: Electric System Transmission and Generation (2010-2020)*, PNM submits the following siting study for the rebuild of the WD 115kV transmission line from single-circuit to double-circuit on the west side of Albuquerque. The Project route is shown on **Figures 2A and 2B**. Applicable plans and policies were reviewed including the *Albuquerque & Bernalillo County Comprehensive Plan as adopted by City Council in March 2017* and the *Facility Plan: Electric System Transmission and Generation (2010-2020)*.

Albuquerque & Bernalillo County Comprehensive Plan as adopted by City Council in March 2017

1. In Chapter 12, Infrastructure, Community Facilities and Services of the Comprehensive Plan on page 12-10, it is stated that, *"PNM is obligated to meet future customer needs for electrical service, provide system reliability, and operate safe facilities… New System facilities, including transmission lines, switching stations, and substations will need to be constructed to meet future demand for electrical service, replace aged infrastructure or to enhance reliability in coming years."*

   Response:
   The WD2 Project meets the obligation and meets all three needs: 1) the WD2 Project will meet future electric demand, 2) the WD2 Project was built in 1951 and is a replacement of aged infrastructure, and 3) will maintain and enhance reliability during and after construction.

2. *Goal 7.6 Context-Sensitive Infrastructure*
   Match infrastructure design to intended densities and development patterns to minimize lifecycle costs and conserve natural resources.
   POLICY 7.6.3 Utility Infrastructure: Encourage design of visible infrastructure (surface and overhead) that respects the character of neighborhoods and communities and protects significant natural and cultural features. [ABC]
   b) Minimize disturbance to environmentally sensitive areas, such as Major Public Open Space and cultural landscapes, and minimize visual impact of utilities with careful siting and design.

   Response:
   The WD2 Project respects the character of the neighborhoods and communities that are located adjacent to the existing transmission corridor that has been in place since the 1950s. Careful siting and design within the existing transmission corridor minimizes visual impacts.

3. *Goal 12.1 Infrastructure Systems*
   Plan, coordinate, and provide for efficient equitable, and environmentally sound infrastructure to support existing communities and the Comp Plan's vision for future growth.
   POLICY 12.1.6 Energy Systems: Coordinate with energy providers to safeguard essential infrastructure to serve existing development and ensure a safe, adequate, and reliable supply to support growth. [ABC]
   a) Maintain an economical and environmentally-sound supply of energy through energy conservation and the use of alternative and renewable energy sources.
   f) See also the Electric System Transmission and Generation Facility Plan (2010-2020).

   Response:
   The WD2 Project will provide a reliable supply of energy to support growth in the metropolitan Albuquerque region.

4. *Goal 13.4 Natural Resources*
   Protect, conserve, and enhance natural resources, habitat and ecosystems.
   POLICY 13.4.3 Energy Resources: Conserve energy and capitalize on renewable energy resources that are plentiful in our region, especially solar and wind energy.
   a) Encourage renewable energy generation and use in private and public development.

   Response:
   The WD2 Project will support maintaining an adequate, economical supply of energy delivering wind and solar renewable energy through the electric grid connection.

Facility Plan: Electric System Transmission and Generation (2010-2020)
This Rank II Plan addresses electric transmission, substation and generation facilities in Albuquerque and Bernalillo County and includes transmission siting and design standards. The WD2 Project is renamed and listed as Project Number 23 in Table 5, Description of Proposed Electric Facility Projects for 2010-2020.

1. *The goal of the Electric Facility Plan is "to ensure that the City of Albuquerque and Bernalillo County have an electric transmission and generation system capable of delivering electric energy in the amount and locations needed by present and future area residents, businesses, and industries".*

   Response:
   The WD2 Project is responding to growth in the metropolitan Albuquerque region.

2. *Location Standards for Transmission: 3. Existing transmission routes satisfying criteria in this section should be used in preference to establishing new routes.*

   Response:
   The WD2 Project utilizes an existing transmission corridor and parallels existing transmission facilities.

A. Project Description and a Summary of Alternative Corridors Examined

Project Description
PNM is proposing to rebuild the existing WD wood H-frame single-circuit 115kV transmission line constructed in 1951 and add another circuit for new steel double-circuit 115kV transmission

line construction. The WD2 115kV Transmission Line System Improvements Project (Project) is located on the west side of the City of Albuquerque (**Figure 1, Project Location**). "Double-circuit" is described as transmission line structures that are designed to carry two circuits. During construction, the existing WD 115kV circuit will need to remain energized. Once constructed, the existing WD Line will be retired and removed. The design includes building the new double-circuit line in a new right-of-way corridor either in or generally adjacent to other transmission corridors, see **Figure 2A and Figure 2B**. This arrangement requires construction crews to work near energized facilities. The Project is listed as #23 in the description of electric facility projects in the *Facility Plan: Electric System Transmission and Generation (2010-2020).*

The Project List in Table 5 is provided for informational purposes that indicate the general location of proposed projects as noted in Section V. Proposed Utility-Owned Electric Facilities: 2010-2020, A. General, on page 10 of the Facility Plan. The Project is located in an area of multiple electric transmission facilities and corridors starting at West Mesa Switching Station. The 36-acre West Mesa Switching Station is a critical part of the electrical transmission system that serves the greater Albuquerque metropolitan region along with the numerous high-voltage transmission lines that connect in and out of the station. The Project parallels existing transmission lines within existing transmission corridors. The total length of the Project in Albuquerque and Bernalillo County is approximately 12.6 miles of which approximately 4.2 miles is located within the City of Albuquerque (**Figure 2A and Figure 2B**).

The Project exits West Mesa Switching Station and travels approximately 2.8 miles south and west through the Ladera Business Park, crossing Unser Boulevard NW west along the existing transmission corridor, crossing Arroyo Vista Boulevard NW and continuing west to the city limits. The Project turns south and re-enters the City of Albuquerque just south of the Westgate Dam Drainage for approximately 1.4 miles as it parallels the west side of the existing WS 345kV transmission line which generally follows 118th Street SW. The Project is identified and described as Project #23 in Table 5 of the *Electric Facility Plan.*

Summary of Alternative Corridors Examined

PNM identified three possible alternatives for the Project that maximized the use of existing transmission corridors in the area and tried to minimize establishing a new transmission corridor. Major factors were examined to determine the most feasible route. Factors identified in the *Electric Facility Plan* were also incorporated.

Alternative 1:

Rebuild the WJ and WV corridor from West Mesa Switching Station to Dennis Chavez Boulevard SW then turning west in a new corridor to the WD corridor then rebuild the WD line south to Huning Ranch Switching Station; remove the existing WD line when completed.

This alternative would be located within the existing WJ and WV transmission corridor and the existing WD corridor. It would also require development of a new corridor along Dennis Chavez Boulevard SW to connect with the WD corridor. The alignment is already double-circuited in parts of the corridor and it was determined that adequate space for the new structures is not available. This alternative poses high risk of outages regarding the ability to maintain system reliability during and after construction. Limited work space poses risks to worker safety.

Alternative 2:

Rebuild the WD line in new easement from West Mesa Switching Station to Huning Ranch Switching Station while the line remains energized; remove the existing WD line when completed.

This alternative would utilize the existing WD transmission corridor for the entire length by constructing the new line double circuit on new structures for the entire length then removing the original single-circuit structures. This alternative poses high risk of outages thus affecting the ability to maintain system reliability during and after construction. Rebuilding the line while it remains energized has major limitations in assuring safe working areas and appropriate clearances for construction workers.

Alternative 3:
Rebuild a portion of the WJ and WD corridor from West Mesa Switching Station to Huning Ranch Switching Station; temporarily connect with another 115kV transmission line; remove the existing WD line when completed.

This alternative would utilize the existing WJ and WD corridors in order to double-circuit the WD line. The alternative poses lower risk to system reliability by allowing the WD line to be temporarily fed from another 115kV source (for approximately 8 weeks then removed) so that approximately 2.5 miles of the WD line in the City of Albuquerque can be disconnected, removed and rebuilt in place within existing easement in the transmission corridor from West Mesa Switching Station to west of Arroyo Vista Boulevard NW. Space would be available for this alternative within the existing transmission corridor. The existing WD line will be removed when the Project is complete.

B. Purpose and Need for the Project
The Project is needed to provide the necessary capacity to serve the southern Albuquerque metropolitan region in order to respond to load demand in the area.

C. Project Location Map and Aerial Photo
The Project Location Map presented on an aerial photo is shown in **Figure 1**.

D. Details of Typical Structures (height and finish)
The WD2 Project will be constructed using a PNM double-circuit design that is similar to the design on page 49 of the *Facility Plan: Electric System Transmission and Generation (2010-2020)*. Typical structure types are shown in **Figure 4**. The double-circuit design is useful in constrained areas and reduces the width of the structure while increasing its height for safety purposes.

E. Existing Overhead Utilities
There are six existing high-voltage transmission lines in the project area: two of the lines are 345kV and four of the lines are 115kV. All are PNM facilities except for one 345kV line, which is an El Paso Electric Company facility. See **Figure 3**.

F. Projected In-Service Date
The in-service date of the Project is July 2020.

II. IDENTIFICATION OF SITING CONSIDERATIONS, IMPACTS AND MITIGATION

A. Study Area Description and Identification of Exclusion Areas and/or Environmental Considerations for Proposed Action

Study Area Description
The study area for the WD2 Project includes the utility corridor south and west of West Mesa Switching Station in the area north of I-40; in the area south of I-40, the study area includes the utility corridor west of 118th Street SW.

Identification of Exclusion Areas and/or Environmental Considerations for Proposed Action
There are no exclusion areas in the project area.

1. Visual Resources

a. Visual Considerations and General Appearance
The visual setting for the Project includes open views to the north, south, east and west. View orientation is typically focused on foreground views along streets and toward the west focused on upland views of the mesa with transmission corridors in the background, and toward background views to the east of the Sandia Mountains.

b. Visual Simulations
Figures 5 – 15 are the visual simulations for the WD2 Project. Each of Figures 5 –15 include two images: 1) a photo showing existing conditions from the viewpoint, and 2) a visual simulation of the proposed project from the same viewpoint.

c. Topography
The topography of the Project area is generally sloping terrain from west to east.

2. Ecological

The WD2 Project is sited within an already developed existing transmission corridor north of I-40 and an existing utility corridor south of I-40 including a water line and natural gas pipeline, which minimizes disturbance to the natural environment. The corridor has been previously disturbed by current and previous transmission lines, utility lines and AMAFCA projects. There are no known sensitive resources or environmental considerations present that would conflict with the proposed Project. The Project does not cross any City designated landfill buffer zones.

3. Land Use

The WD2 Project is sited following standards set forth in the Electric Facility Plan rebuilding an existing facility within an existing utility corridor north of I-40. South of I-40, the WD2 Project parallels 118th Street SW in an existing utility corridor on the west side of an existing water line and natural gas pipeline.

a. Land Use and Zoning Along the Corridor
The Project corridor in the City is within an existing transmission corridor. The corridor also includes a series of AMAFCA ponds used for drainage control. The area is generally developed north of I-40 on either side of the corridor. South of I-40, the transmission corridor is located along the west side of 118th Street NW on vacant, undeveloped land. Existing land uses in the immediate vicinity of the WD2 Project north of I-40 include:

- Electric utility transmission lines within an existing utility corridor including 6 separate transmission lines
- Commercial uses in Ladera Business Park
- Residential development west of Unser Blvd. NW to Arroyo Vista Blvd. NW
- AMAFCA drainage ponds
- Vacant, undeveloped land

Existing land uses in the immediate vicinity of the WD2 Project south of I-40 include:

- Electric utility transmission lines within an existing utility corridor including AMAFCA facilities, existing water line and existing natural gas pipeline
- Residential development east of 118th Street SW
- Vacant, undeveloped land

The Project north of I-40 is located on lands that are zoned either commercial, planned development, or planned community (**Figure 17A**). The Project south of I-40 is located on lands that are zoned planned development or residential (**Figure 17B**).

b. Location of Streets and Functional Classifications
The WD2 Project crosses one interstate highway, three major streets and parallels one major street in the City of Albuquerque. The Current Roadway Functional Classification System map for the Albuquerque Metropolitan Planning Area (approved by the Metropolitan Transportation Board and updated and approved by the Federal Highway Administration on March 15, 2016) identifies the following streets:

- Unser Blvd. – Principal Arterial
- Arroyo Vista NW – Major Collector
- Interstate 40 – Interstate
- Central Ave. – Principal Arterial
- 118th Street NW – Major Collector

Access to the WD2 Project will be from the paved roads along the corridor as well as along the existing patrol 2-tracks associated with the existing WD line. There are no proposed new streets.

c. FEMA Special Flood Hazard Zone
The Federal Emergency Management Agency (FEMA) has identified Zone A and Zone AE flood hazard areas in association with the project area AMAFCA ponds, arroyos and draws totaling 0.78 miles of the 4.2 miles within City of Albuquerque. The project corridor passes through these areas, but no installation of structures or other ground disturbing construction is expected within them. If the final design indicates that a structure may occur within a Zone A or Zone AE flood hazard area, PNM will work in consultation with the appropriate flood zone authorities to address any requirements.

B. Options for Construction

1. Approximate Line Length
The approximate line length is 4.2 miles located in the City of Albuquerque. The route alignment is shown in **Figures 2A and 2B**.

2. Average Structure Height
The majority of structures for the WD2 Project will be double-circuit tangents which are estimated at 85 feet in height. Double-circuit dead-end structures, which are used for angles and terminations, are estimated at 85 feet. The double-circuit tangent H-Frame structures are approximately 72 feet in height. Structure height must accommodate necessary clearances as directed by the National Electric Safety Code (NESC) which is also a standard in the Electric Facility Plan.

3. Approximate Number of Structures
   A total of approximately 50 structures are proposed to be installed in the City of Albuquerque. Once the Project is constructed, the existing WD line with approximately 38 structures will be removed.

4. Average Span Length
   The average span length is estimated to be between 600 feet and 800 feet.

5. Estimated Installed Costs – Above Ground and Underground
   Above Ground in the City of Albuquerque – approximately $7.2 million
   Underground in the City of Albuquerque – approximately $50.4 million (7 times) at a minimum or up to ten times the overhead cost.

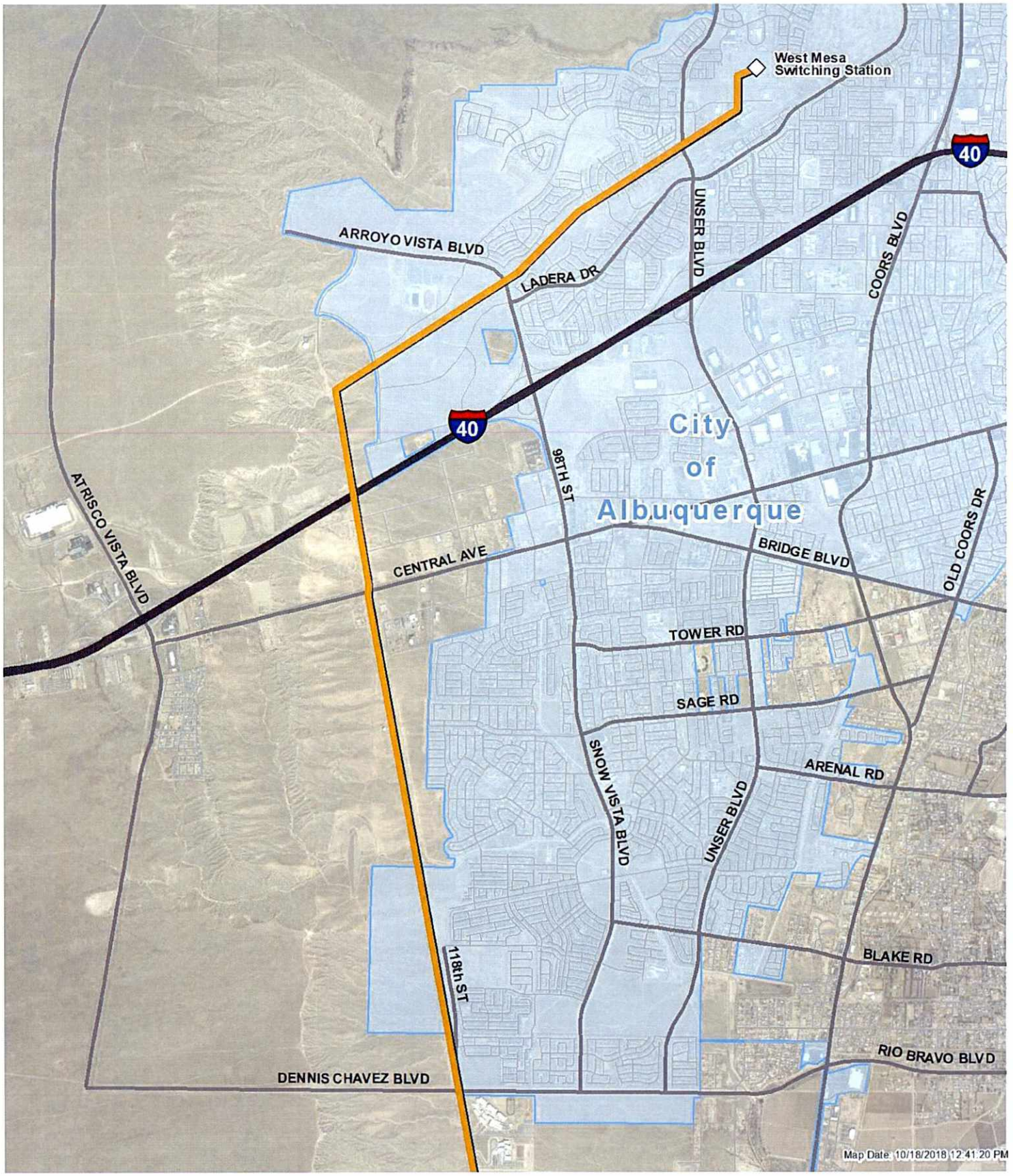
   The cost to construct this critical transmission line underground is between 7-10 times more than above ground construction. Also, it is not technically or operationally equivalent to the above-ground system. In addition, the differential cost associated with underground construction is an excessive cost to require all City of Albuquerque customers to bear. The portions outside of the City of Albuquerque would not be placed underground.

C. Project Costs

The total estimated cost of the Project in the City of Albuquerque is approximately $7.2 million. Approximately $231,790 will be paid by PNM annually to Bernalillo County in property taxes.

Figures:

Figure 1 Project Vicinity Map
Figure 2A Project Route Location, North
Figure 2B Project Route Location, South
Figure 3 Existing Overhead Transmission Lines
Figure 4 Typical Structure Types
Figure 5 Photo Simulation – Location 1
Figure 6 Photo Simulation – Location 2
Figure 7 Photo Simulation – Location 3
Figure 8 Photo Simulation – Location 4
Figure 9 Photo Simulation – Location 5
Figure 10 Photo Simulation – Location 6
Figure 11 Photo Simulation – Location 7
Figure 12 Photo Simulation – Location 8
Figure 13 Photo Simulation – Location 9
Figure 14 Photo Simulation – Location 11
Figure 15 Photo Simulation – Location 12
Figure 16A Land Use, North
Figure 16B Land Use, South
Figure 17A Zoning, North
Figure 17B Zoning, South



West Mesa Switching Station ◇

WD2 Project Corridor

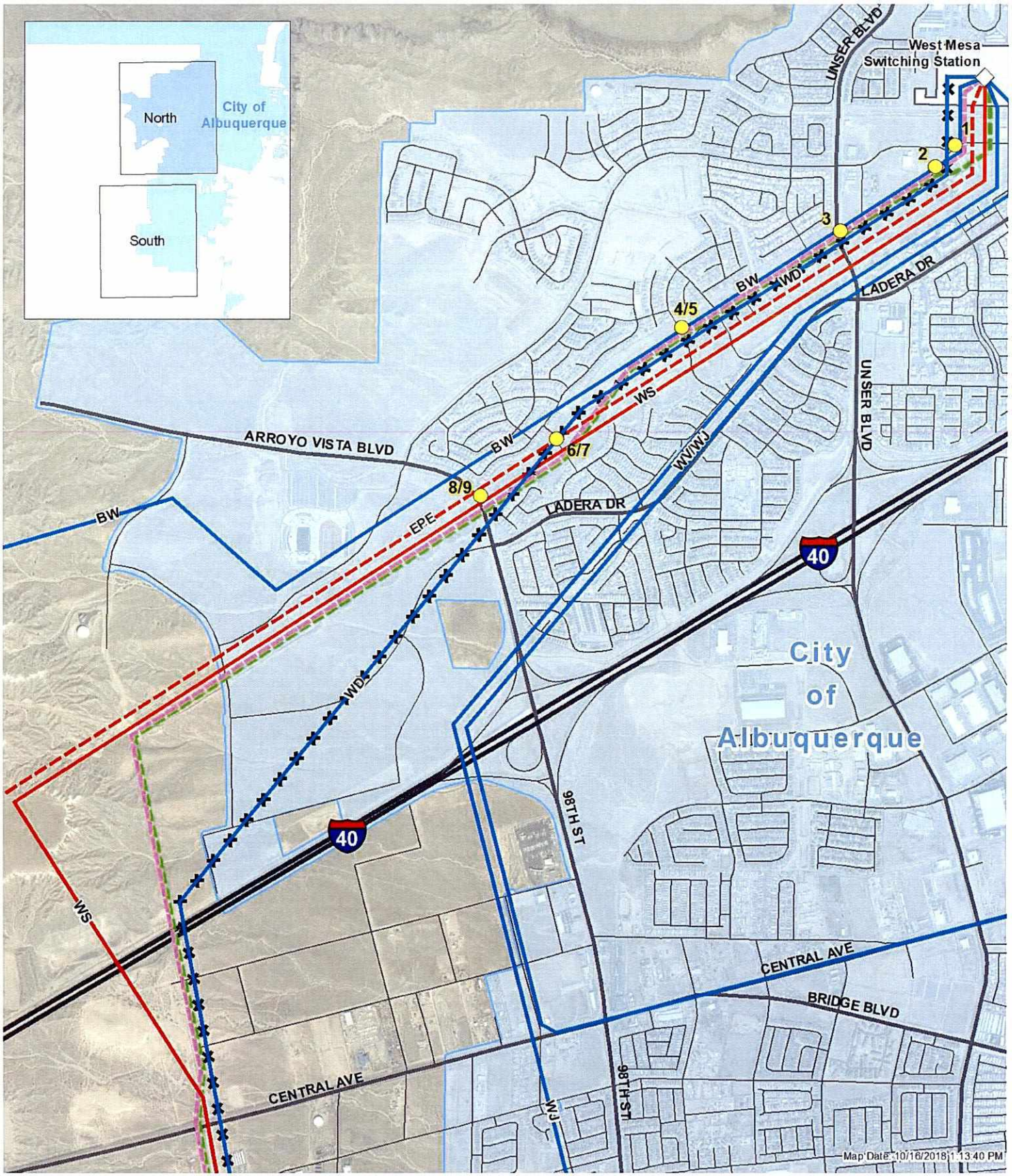
0 2,000 4,000
Feet

N

WD2 115kV TRANSMISSION LINE SYSTEM IMPROVEMENTS PROJECT

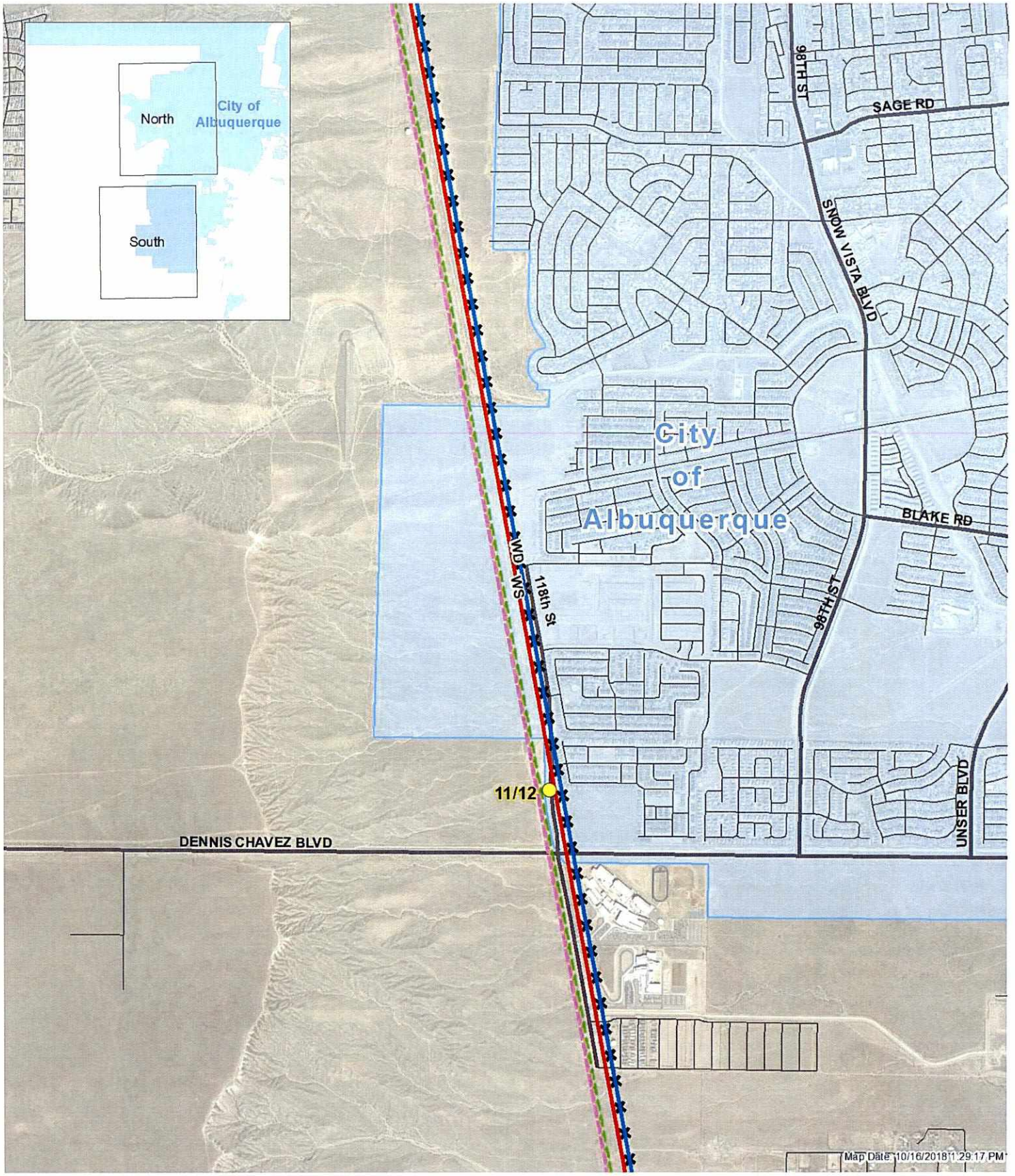
Figure 1 Project Vicinity Map

PNM



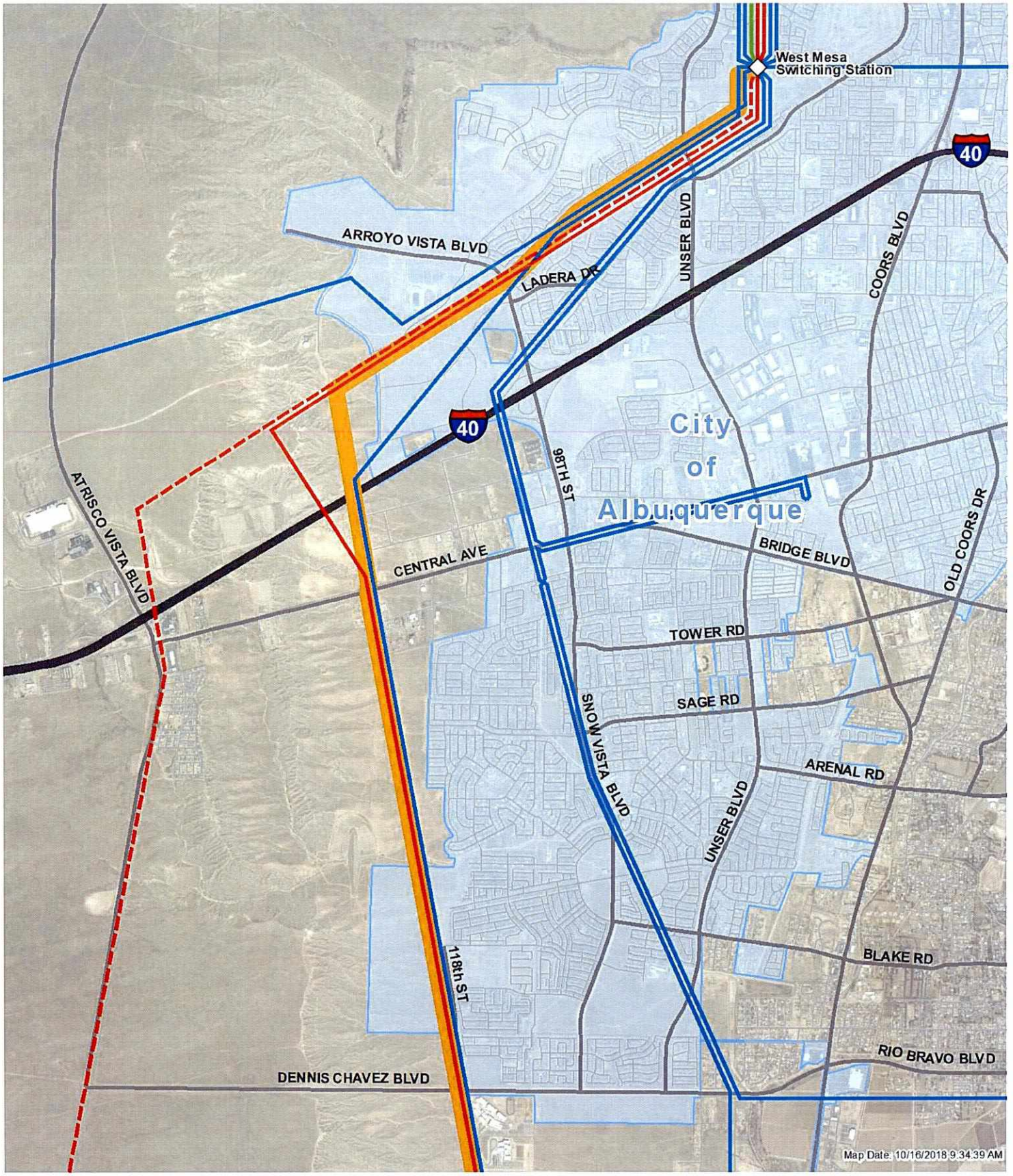
WD2 115kV TRANSMISSION LINE SYSTEM IMPROVEMENTS PROJECT

Figure 2A Project Route Location, North



WD2 115kV TRANSMISSION LINE SYSTEM IMPROVEMENTS PROJECT

Figure 2B Project Route Location, South



Transmission Lines, PNM
345 kV
230 kV
115 kV

Transmission Lines, Other
345 kV Other

WD2 Project Corridor

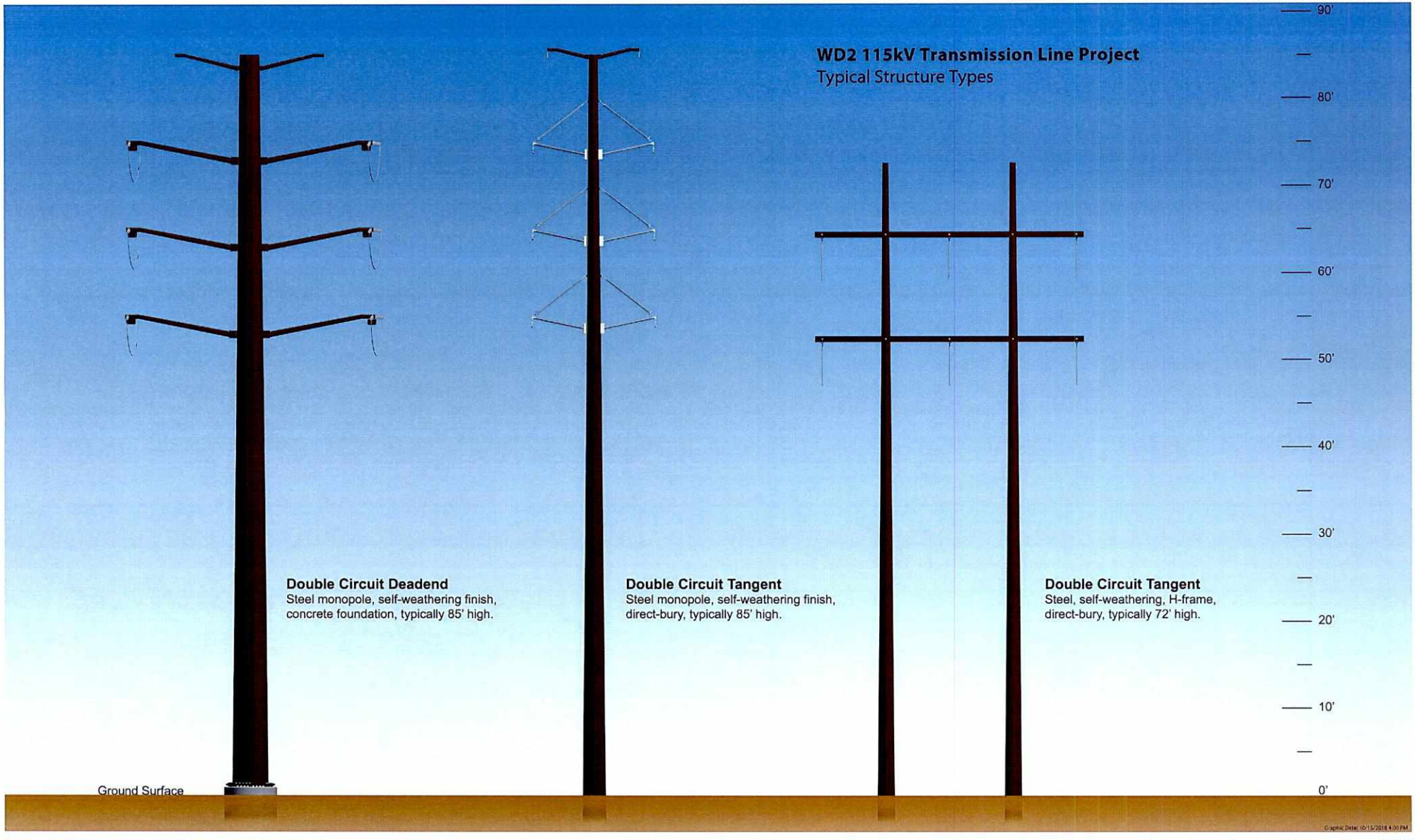
0 2,000 4,000
Feet

N

WD2 115kV TRANSMISSION LINE SYSTEM IMPROVEMENTS PROJECT

Figure 3 Existing Overhead Transmission Lines

PNM



WD2 115kV TRANSMISSION LINE SYSTEM IMPROVEMENTS PROJECT

Figure 4 Typical Structure Types

Existing Conditions

Proposed Configuration

Reasonable efforts to provide an accurate visual simulation have been made and are based on preliminary designs for this electrical transmission project. This computer-generated rendering should be considered only an approximate representation of how the proposed facilities may appear.

WD2 115kV TRANSMISSION LINE SYSTEM IMPROVEMENTS PROJECT

Figure 5 Photo Simulation – Location 1

Southwest of Corner of La Morada Place NW and Vista Oriente NW. Facing Southwest

Graphic Date: 10/15/2018 10:00 PM

PNM

Existing Conditions

Proposed Configuration

Reasonable efforts to provide an accurate visual simulation have been made and are based on preliminary designs for this electrical transmission project. This computer-generated rendering should be considered only an approximate representation of how the proposed facilities may appear.

WD2 115kV TRANSMISSION LINE SYSTEM IMPROVEMENTS PROJECT

Figure 6 Photo Simulation – Location 2

Corner of La Morada Place NW and Vista Oriente NW.
Facing Southwest

Graphic Date: 10/15/2018 10:00 PM

PNM

Existing Conditions

Proposed Configuration

Reasonable efforts to provide an accurate visual simulation have been made and are based on preliminary designs for this electrical transmission project. This computer-generated rendering should be considered only an approximate representation of how the proposed facilities may appear.

WD2 115kV TRANSMISSION LINE SYSTEM IMPROVEMENTS PROJECT

Figure 7 Photo Simulation – Location 3

Intersection of Unser Blvd. NW and
La Morada Place NW Facing Northeast

Graphic Date: 10/16/2018 1:00 PM

PNM

Existing Conditions

Proposed Configuration

Reasonable efforts to provide an accurate visual simulation have been made and are based on preliminary designs for this electrical transmission project. This computer-generated rendering should be considered only an approximate representation of how the proposed facilities may appear.

WD2 115kV TRANSMISSION LINE SYSTEM IMPROVEMENTS PROJECT

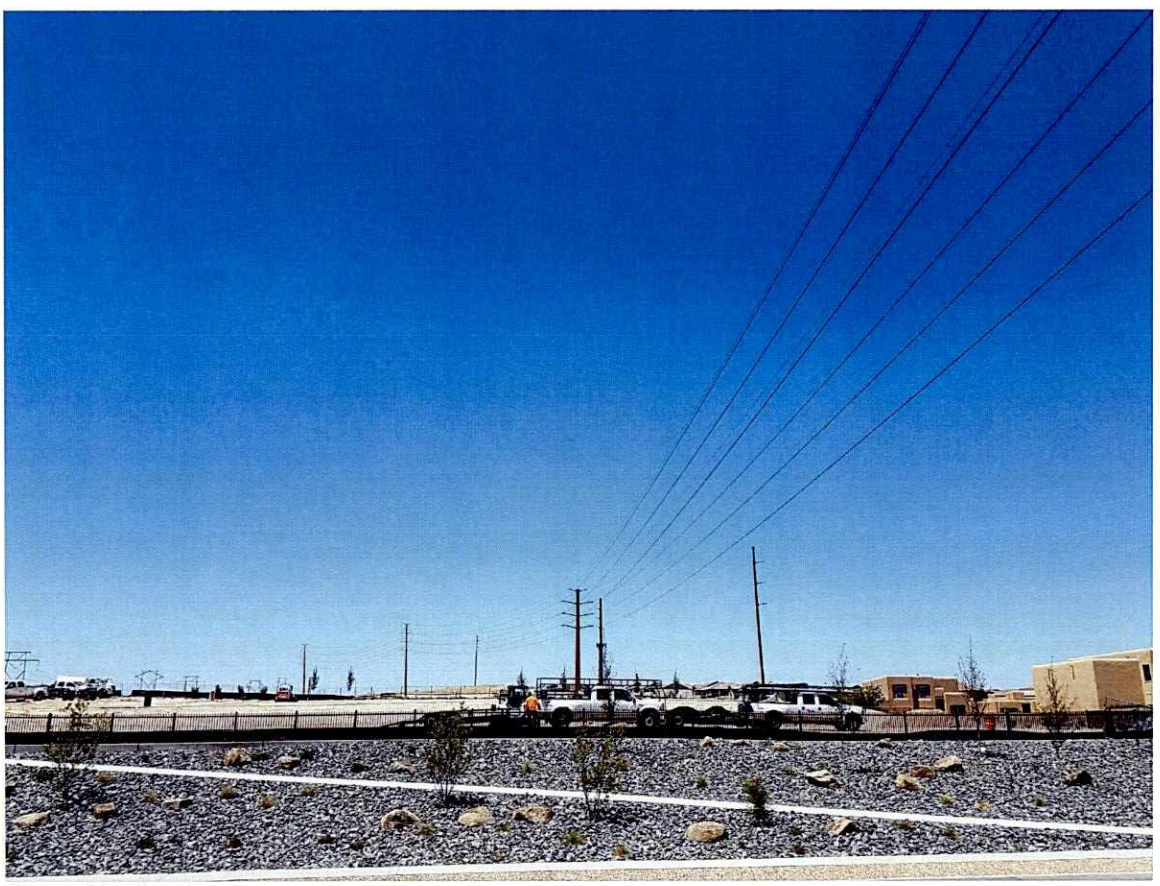
Figure 8 Photo Simulation – Location 4

From Casa Verde Ave. NW
Facing Northeastt

Graphic Date: 10/16/2018 1:00 PM

PNM

Existing Conditions



Proposed Configuration

Reasonable efforts to provide an accurate visual simulation have been made and are based on preliminary designs for this electrical transmission project. This computer-generated rendering should be considered only an approximate representation of how the proposed facilities may appear.

WD2 115kV TRANSMISSION LINE SYSTEM IMPROVEMENTS PROJECT

Figure 9 Photo Simulation – Location 5

From Casa Verde Ave. NW
Facing Southwest

Graphic Date: 10/16/2018 1:00 PM

PNM

Existing Conditions

Proposed Configuration

Reasonable efforts to provide an accurate visual simulation have been made and are based on preliminary designs for this electrical transmission project. This computer-generated rendering should be considered only an approximate representation of how the proposed facilities may appear.

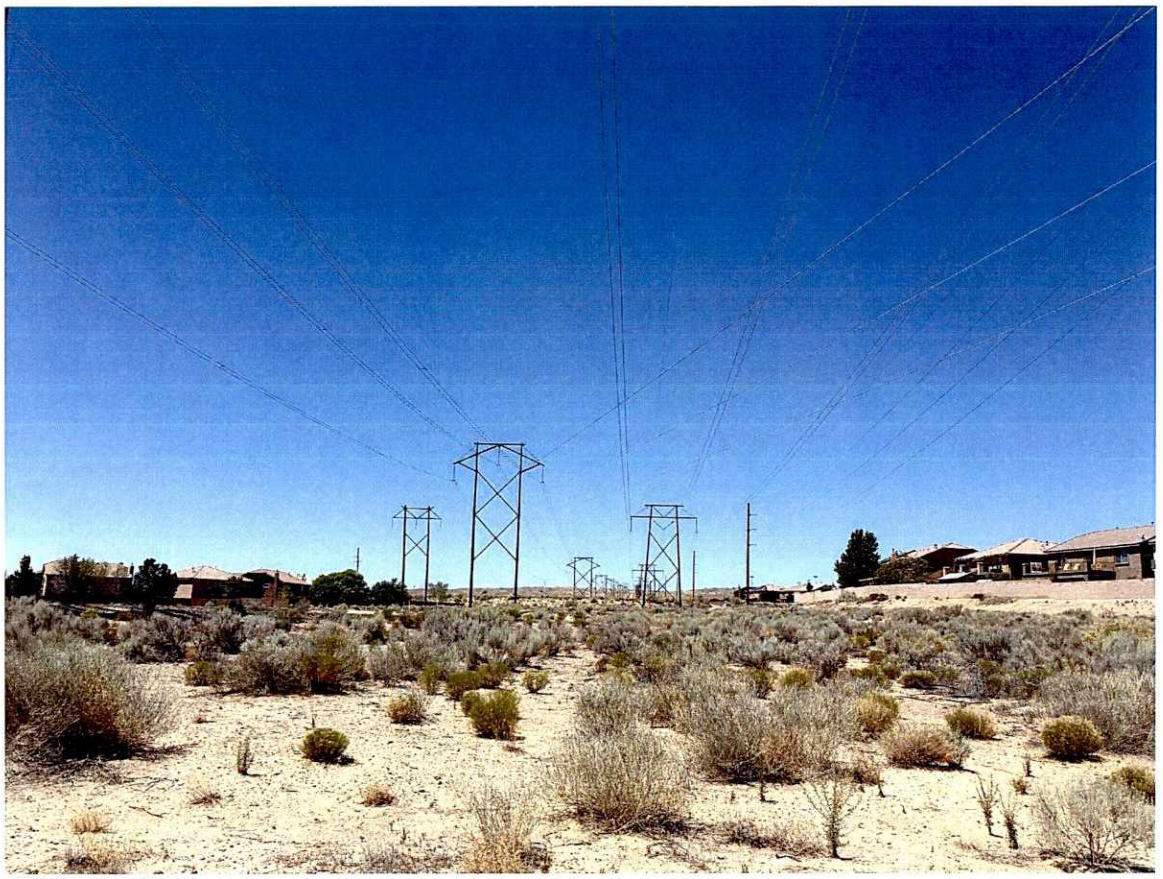
WD2 115kV TRANSMISSION LINE SYSTEM IMPROVEMENTS PROJECT

Figure 10 Photo Simulation – Location 6

From Tokachi Dr. NW
Facing Northeast

Graphic Date: 10/16/2018 1:00 PM

PNM



Existing Conditions

Proposed Configuration

Reasonable efforts to provide an accurate visual simulation have been made and are based on preliminary designs for this electrical transmission project. This computer-generated rendering should be considered only an approximate representation of how the proposed facilities may appear.

WD2 115kV TRANSMISSION LINE SYSTEM IMPROVEMENTS PROJECT

Figure 11 Photo Simulation – Location 7

From Tokachi Dr. NW
Facing Southwest

Graphic Date: 10/16/2018 1:00 PM

PNM

Existing Conditions

Proposed Configuration

Reasonable efforts to provide an accurate visual simulation have been made and are based on preliminary designs for this electrical transmission project. This computer-generated rendering should be considered only an approximate representation of how the proposed facilities may appear.

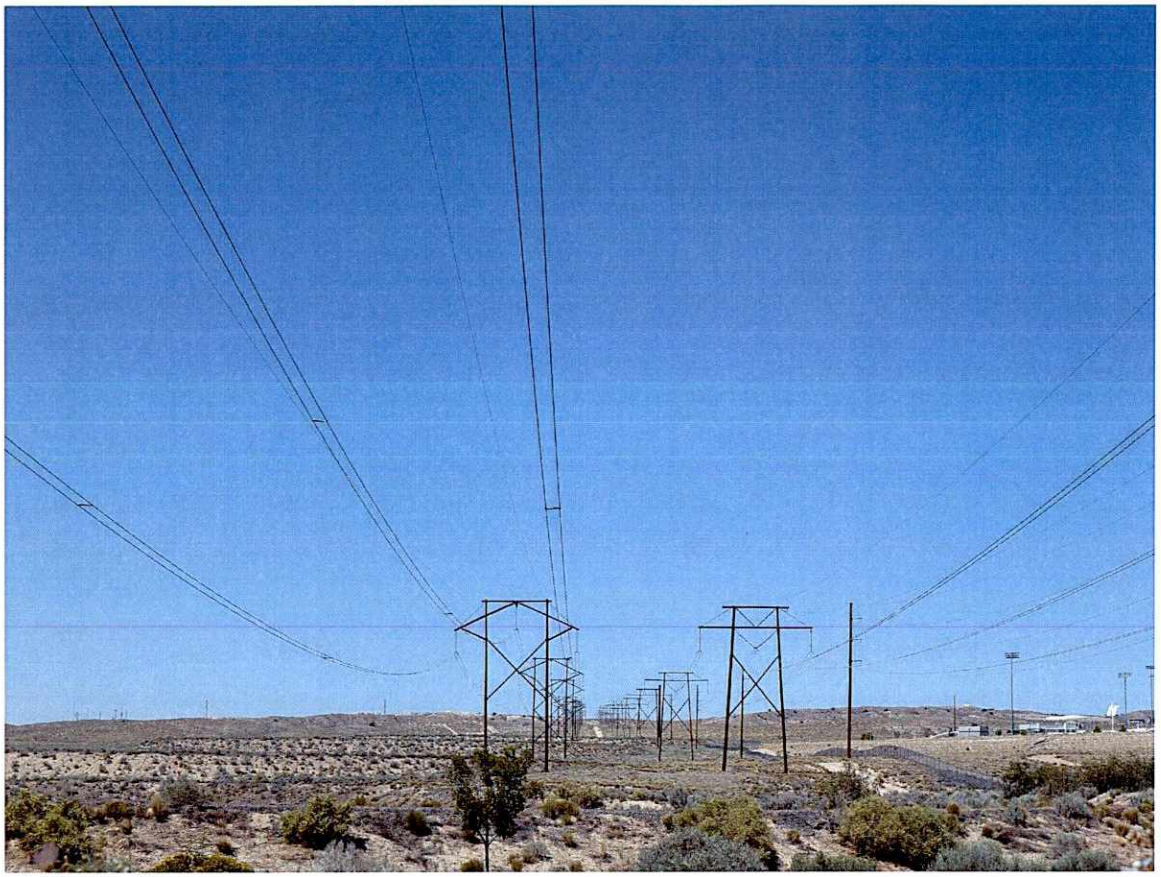
WD2 115kV TRANSMISSION LINE SYSTEM IMPROVEMENTS PROJECT

Figure 12 Photo Simulation – Location 8

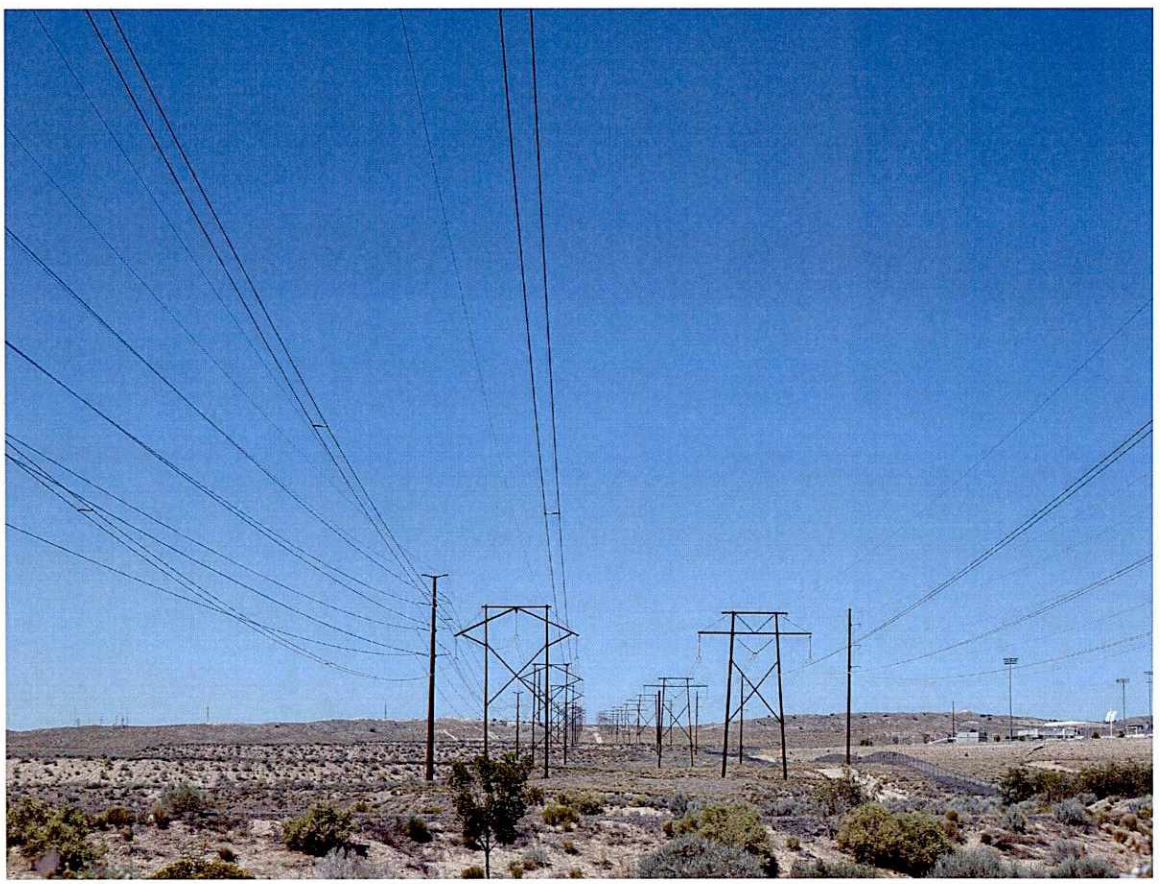
From Arroyo Vista Blvd. NW
Facing Northeast

Graphic Date: 10/16/2018 1:00 PM

PNM



Existing Conditions



Proposed Configuration

Reasonable efforts to provide an accurate visual simulation have been made and are based on preliminary designs for this electrical transmission project. This computer-generated rendering should be considered only an approximate representation of how the proposed facilities may appear.

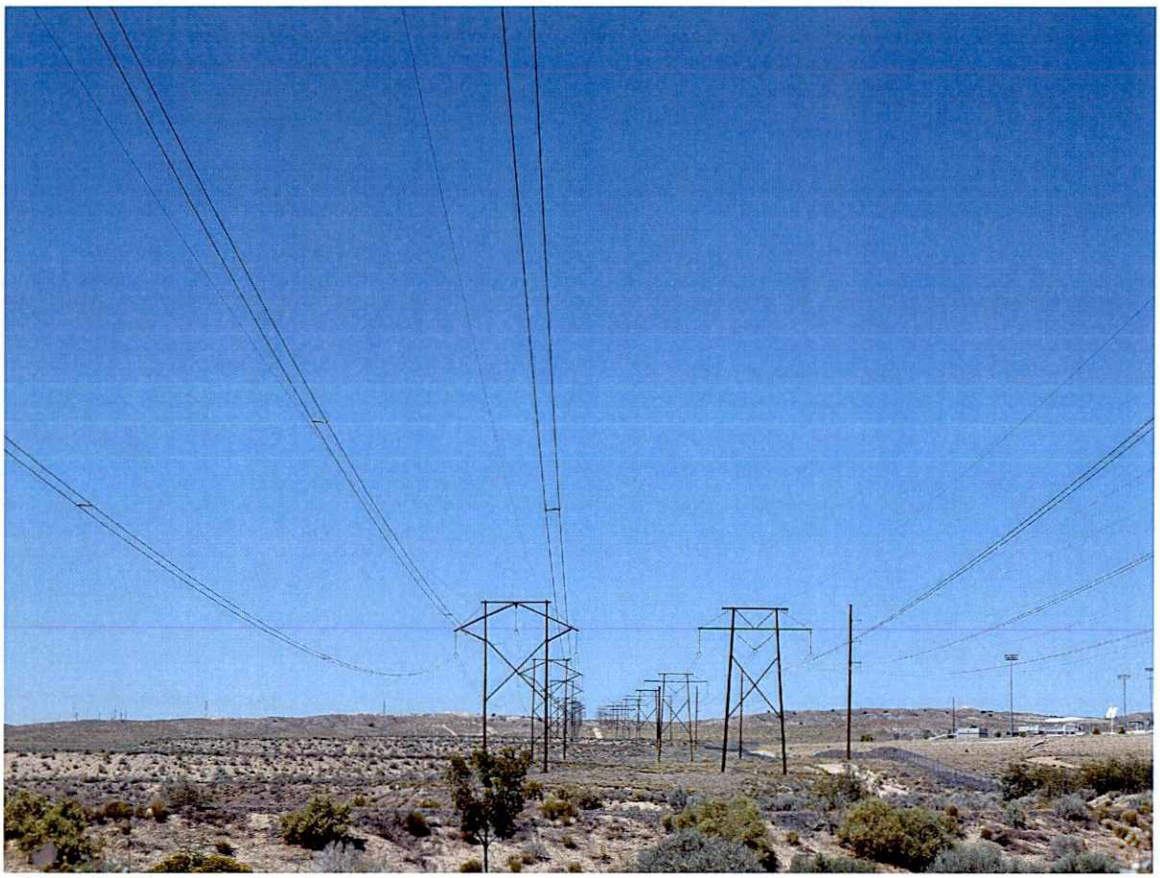
WD2 115kV TRANSMISSION LINE SYSTEM IMPROVEMENTS PROJECT

Figure 13 Photo Simulation – Location 9

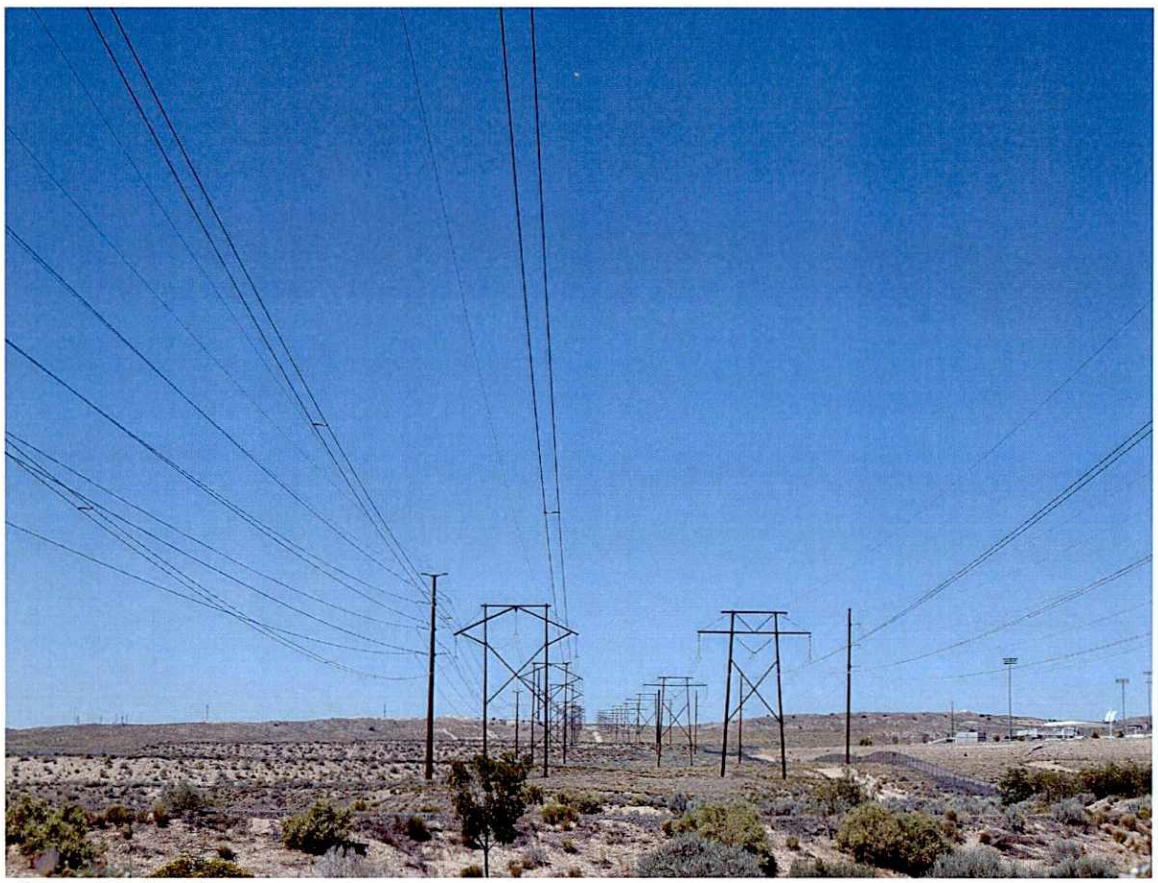
From Arroyo Vista Blvd. NW
Facing Southwest

Graphic Date: 10/16/2018 1:20 PM

PNM



Existing Conditions



Proposed Configuration

Reasonable efforts to provide an accurate visual simulation have been made and are based on preliminary designs for this electrical transmission project. This computer-generated rendering should be considered only an approximate representation of how the proposed facilities may appear.

WD2 115kV TRANSMISSION LINE SYSTEM IMPROVEMENTS PROJECT

Figure 13 Photo Simulation – Location 9

From Arroyo Vista Blvd. NW
Facing Southwest

Graphic Date: 10/16/2018 1:20 PM

PNM

Existing Conditions

Proposed Configuration

Reasonable efforts to provide an accurate visual simulation have been made and are based on preliminary designs for this electrical transmission project. This computer-generated rendering should be considered only an approximate representation of how the proposed facilities may appear.

WD2 115kV TRANSMISSION LINE SYSTEM IMPROVEMENTS PROJECT

Figure 14 Photo Simulation – Location 11

From 118th St. SW
Facing North

Graphic Date: 10/16/2018 1:20 PM

PNM

Existing Conditions

Proposed Configuration

Reasonable efforts to provide an accurate visual simulation have been made and are based on preliminary designs for this electrical transmission project. This computer-generated rendering should be considered only an approximate representation of how the proposed facilities may appear.

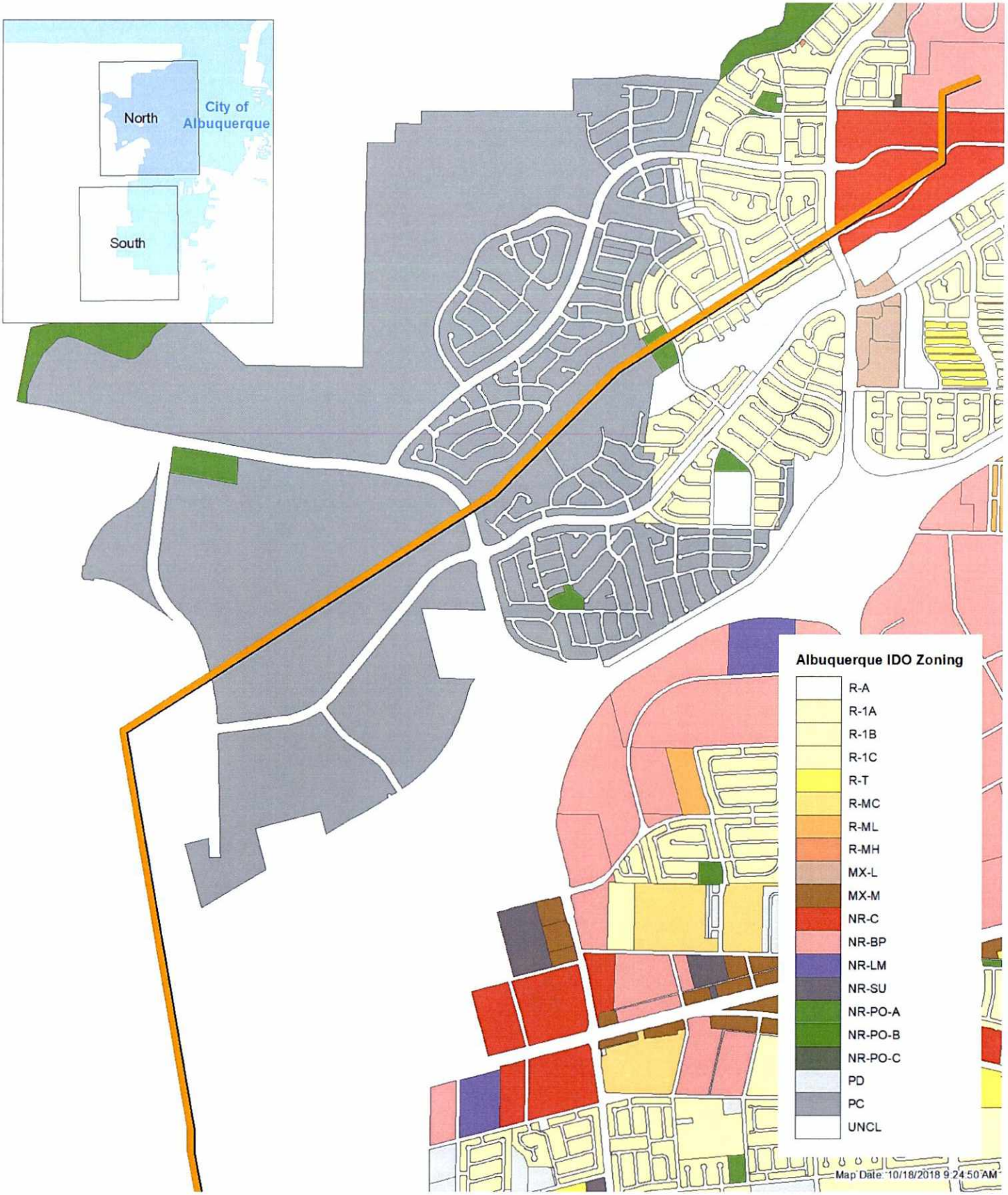
WD2 115kV TRANSMISSION LINE SYSTEM IMPROVEMENTS PROJECT

Figure 15 Photo Simulation – Location 12

From 118th St. SW
Facing South

Graphic Date: 10/16/2018 1:20 PM

PNM



WD2 Project Corridor

Data Source: City of Albuquerque

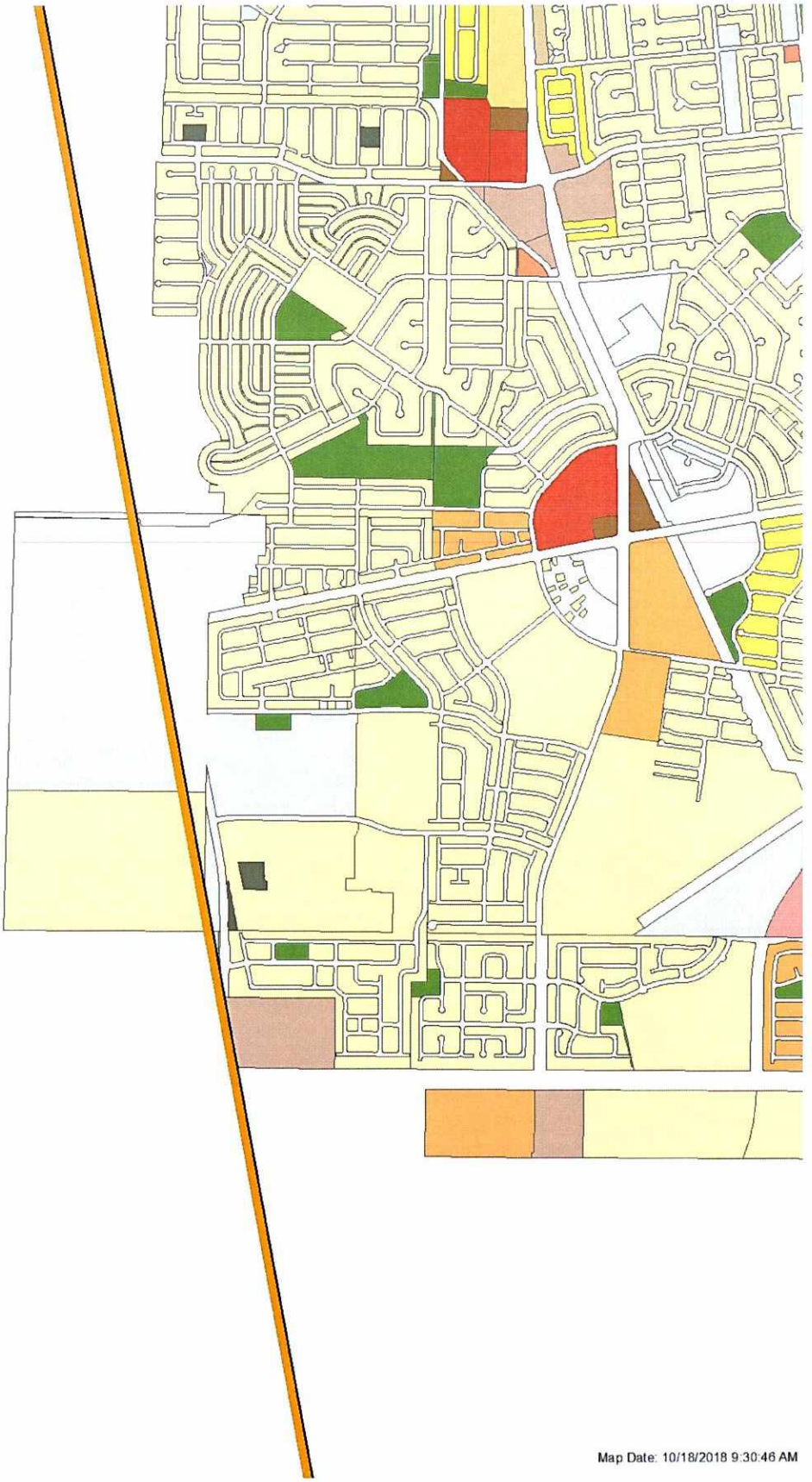
0 1,000 2,000
Feet

N

WD2 115kV TRANSMISSION LINE SYSTEM IMPROVEMENTS PROJECT

Figure 16A Zoning, North

PNM



Albuquerque IDO Zoning

- R-1A
- R-1B
- R-1C
- R-T
- R-MC
- R-ML
- R-MH
- MX-T
- MX-L
- MX-M
- NR-C
- NR-BP
- NR-PO-A
- NR-PO-C
- PD
- UNCL

Map Date: 10/18/2018 9:30:46 AM

WD2 Project Corridor

Data Source: City of Albuquerque

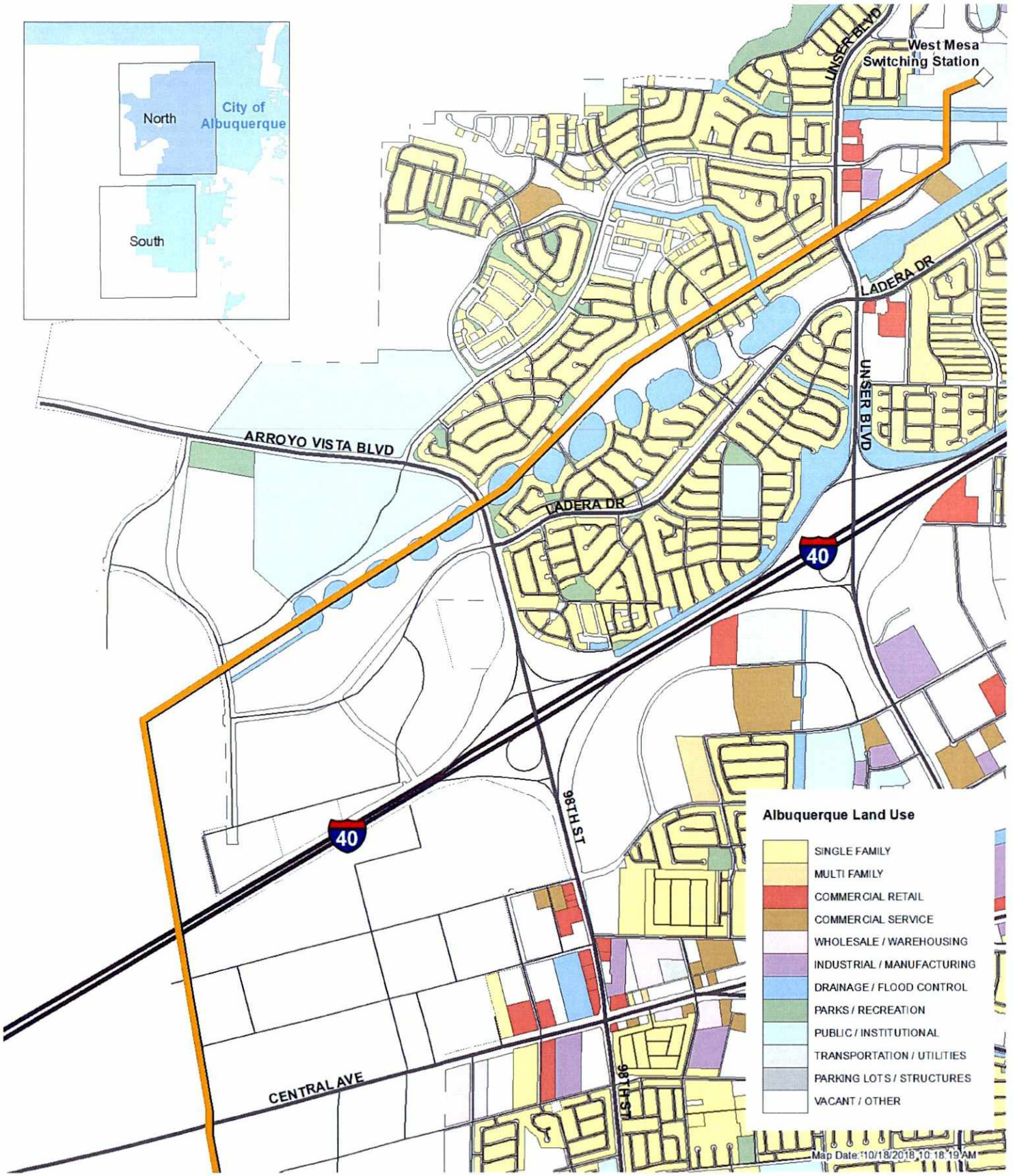
0 1,000 2,000
Feet

N

WD2 115kV TRANSMISSION LINE SYSTEM IMPROVEMENTS PROJECT

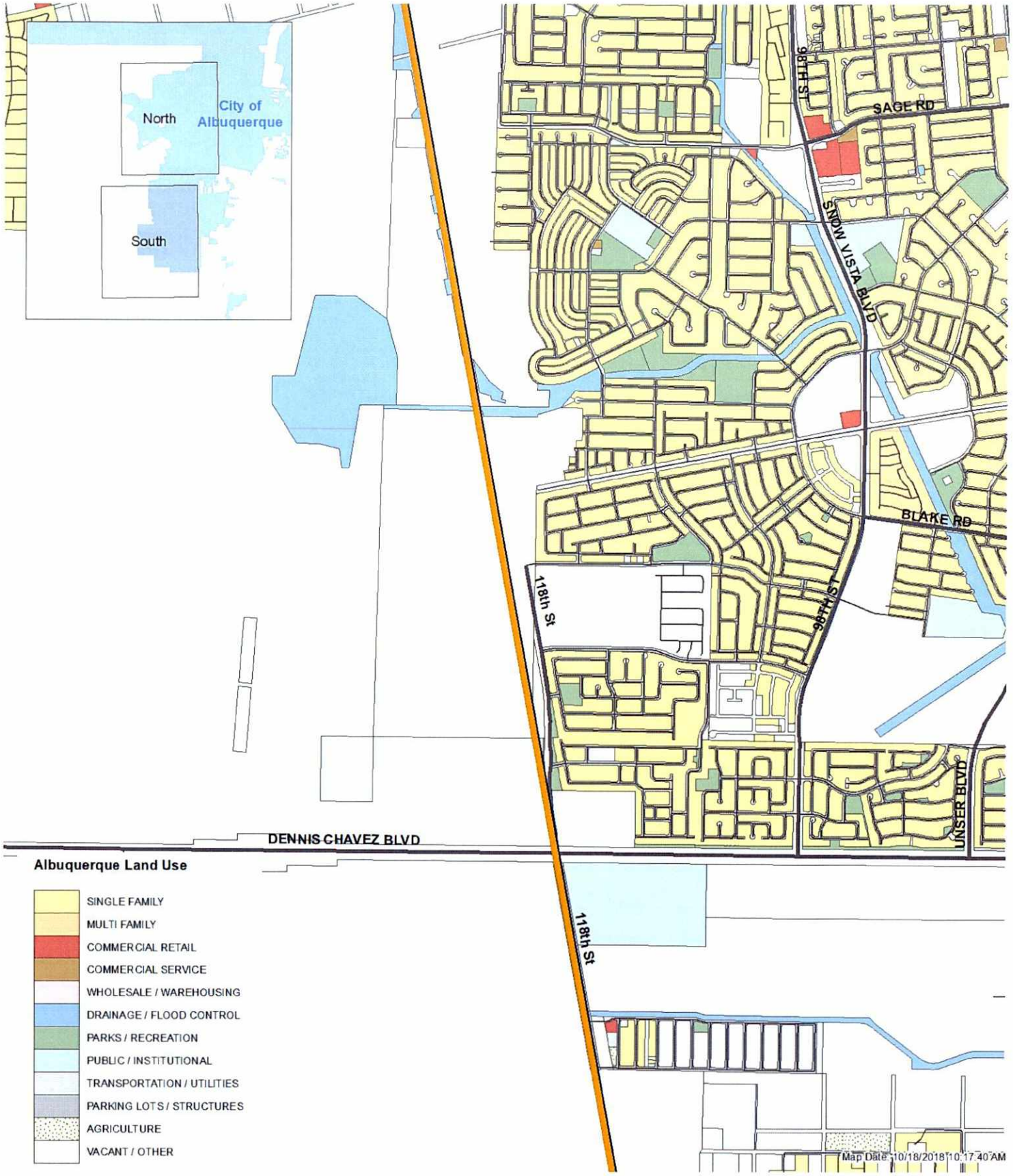
Figure 16B Zoning, South

PNM



WD2 115kV TRANSMISSION LINE SYSTEM IMPROVEMENTS PROJECT

Figure 17A Land Use, North



WD2 115kV TRANSMISSION LINE SYSTEM IMPROVEMENTS PROJECT

Figure 17B Land Use, South